



FAKING NEWS

Fraudulent News and the Fight for Truth

October 12, 2017 © 2017 PEN America. All rights reserved.

PEN America stands at the intersection of literature and human rights to protect open expression in the United States and worldwide. We champion the freedom to write, recognizing the power of the word to transform the world. Our mission is to unite writers and their allies to celebrate creative expression and defend the liberties that make it possible.

Founded in 1922, PEN America is the largest of more than 100 centers of PEN International. Our strength is in our membership—a nationwide community of more than 5,000 novelists, journalists, poets, essayists, playwrights, editors, publishers, translators, agents, and other writing professionals. For more information, visit pen.org.

Cover photograph: Dru Menaker



CONTENTS

EXECUTIVE SUMMARY	4
INTRODUCTORY ESSAY FRAUDULENT NEWS AND THE THREAT TO FREE EXPRESSION	8
DEFINING FRAUDULENT NEWS	23
RELEVANT DOMESTIC AND INTERNATIONAL LAW	24
NEWS CONSUMERS' BILL OF RIGHTS AND RESPONSIBILITIES	26
PREFACE	28
FACEBOOK	29
GOOGLE	40
TWITTER	49
PROFESSIONAL JOURNALISTS	53
FACT-CHECKING	64
NEWS LITERACY	70
RECOMMENDATIONS	76
METHODOLOGY AND ACKNOWLEDGMENTS	78
ENDNOTES	79

EXECUTIVE SUMMARY

aking News: Fraudulent News and the Fight for Truth examines the rise of fraudulent news, defined here as demonstrably false information that is being presented as a factual news report with the intention to deceive the public, and the related erosion of public faith in traditional journalism. The report identifies proposed solutions at the intersection of technology, journalism, and civil society to empower news consumers with better skills and tools to help them process the torrents of information they see online.

The proliferation of false information and rising distrust in the established news media, due in part to a deliberate campaign of denigration, pose a looming crisis for American democracy and civic life. A series of factors—soaring levels of mistrust of journalism and the media, an explosion of new online news outlets, rapid changes in patterns of information consumption, sharp ideological divides that dictate which media outlets are trusted by whom, daily attacks on the press by the president of the United States and his allies, and stumbles by

At a time of domestic political upheaval, sharp policy divisions, and intensifying international conflicts, the spread of disinformation and the related—yet distinct—problem of distrust of the media pose a fundamental threat to the quality of our public discourse and to our political system, sound policy outcomes, and national cohesion.

the media itself in an era of cutthroat competition and instantaneous transmission of information—combine to call into question existing methods for disseminating and validating the news for and by an information-hungry but skeptical public. At a time of domestic political upheaval, sharp policy divisions, and intensifying international conflicts, the

spread of disinformation and the related—yet distinct—problem of distrust of the media pose a fundamental threat to the quality of our public discourse and to our political system, sound policy outcomes, and national cohesion.

If left unchecked, the continued spread of fraudulent news and the erosion of public trust in the news media pose a significant and multidimensional risk to American civic discourse and democracy, building gradually over time. These developments have already conspired to create a trust deficit in which many Americans credit few, if any, sources of news. This diminished trust could have far-reaching implications for American governance and society, undermining the news media's role as the fourth estate and an important check against infringements

of civil liberties. The experience of societies around the world that have grappled with these challenges in varying contexts suggests that even those implications that now seem farfetched should not be excluded from consideration. Such challenges include: the increasing apathy of a poorly informed citizenry; unending political polarization and gridlock; the undermining of the news media as a force for government accountability; a long-term risk to the viability of serious news; an inability to devise and implement fact and evidence-driven policies; the vulnerability of public discourse to manipulation by private and foreign interests; an increased risk of panic and irrational behavior among citizens and leaders; and government overreach, unfettered by a discredited news media and detached citizenry.

Faking News looks at how the spread of fraudulent news has been facilitated by Facebook, Google, and Twitter, and the ways each company is responding to the problem. The report also discusses how traditional journalism has in part contributed to the breakdown of public trust in the media-through partisan reporting, the blurring of fact and opinion, a lack of transparency around policies and procedures, and even honest mistakes, among other reasons—and what newsrooms are doing to rebuild that trust and improve the accuracy and transparency of their reporting processes. Civil-society-led initiatives, including professional fact-checkers and news literacy education programs round out PEN America's examination of proposed solutions to the fraudulent news crisis. The report also explores the implications of these approaches for freedom of expression, recognizing that in some areas difficult trade-offs exist between allowing the unhampered transmission of ideas and information, and preventing public discourse from being mired in falsehoods.

The report's key findings include:

- The recognition of fraudulent news as a threat to free expression should not be employed as a justification for broad new government or corporate restrictions on speech, measures whose effects would be far more harmful to free speech.
- Technology and social media platforms have a significant role to play in curbing the spread of fraudulent news, but approaches like cutting off advertising revenue or adjusting algorithms to target fraudulent news must be strictly limited to purveyors of demonstrably false, intentionally



deceptive information and should establish an appeals mechanism for those who believe that their websites should not have been targeted in these efforts. Platforms should also instruct personnel involved in identifying purveyors of fraudulent news to err on the side of inclusion when deciding which sites to de-emphasize in algorithms or block from ad services, in order to protect robust political discourse and users' access to information.

- For all of the major technology and social media companies, one of the best defenses against the spread of fraudulent news on their platforms is to help equip users with tools and skills to evaluate the information they see and consume. They should explore ways to feature news literacy information on their platforms, and should support, through funding and partnerships, news literacy initiatives and independent fact-checking projects.
- Technology and social media companies must be more transparent and work harder to maximize the amount of information they share (while respecting users' privacy), so that researchers can investigate how well their approaches to curbing fraudulent news are working, fact-checkers can identify ways to improve their work and its impact, and the public can understand more about how information is presented to them on the platforms.
- News organizations can signal accountability and help assuage distrust around reporting practices and editorial decisions by ensuring that their websites provide easily accessible information outlining their standards, practices, and policies-including how they address errors, provide adequate fact-checking, and make use of a public editor or ombudsperson.
- News organizations should improve the labeling of content and graphics, especially online, to ensure that news items are visually discernible from opinion, analysis, sponsored content, and paid advertisements. Newsrooms should also establish or clarify their headline-writing standards to ensure that headlines are not misleading or overly sensational. Headlines that fail to deliver on the content they promise risk alienating readers and sowing greater distrust and suspicion of media biases.
- News literacy programs are among the most promising approaches to addressing the long-term harms posed by fraudulent news, because they hold the potential to reshape Americans' attitude toward, and evaluation of, the news media. There will always be efforts to spread false news online

as long as there is financial or political gain to be had from doing so. But if there is a concerted, widespread, systematic effort to educate people, especially younger generations, about how to be savvy and responsible news consumers, the toxic effects of fraudulent news may be substantially lessened. Public officials, educators, librarians, and the public should press for the adoption of news literacy courses as a core part of school curricula, and should make the case for their value as a benefit to the entire country and the health of our democracy.

Faking News sets forth a News Consumers' Bill of Rights and Responsibilities to reflect and push forward PEN America's view that empowered citizens are the ultimate solution to resolving the crisis of trust. PEN America

views the rights contained in this draft "bill" as rooted in the free expression rights contained in U.S. and international law, which include not just the right to speak freely but also the right to impart and receive information. Changes in the media landscape require the elaboration of these rights so that citizens have the information and tools they need to receive information conscientiously with the will and ability to

Faking News sets forth a News Consumers' Bill of Rights and Responsibilities to reflect and push forward PEN America's view that empowered citizens are the ultimate solution to resolving the crisis of trust. PEN America views the rights contained in this draft "bill" as rooted in the free expression rights contained in U.S. and international law, which include not just the right to speak freely but also the right to impart and receive information.

weigh its credibility. These rights also relate to how news audiences digest the content conveyed by media outlets and online platforms.

The power of fraudulent news lies ultimately in the minds of news consumers. Accordingly, measures to address the crisis of truth should first and foremost center on enabling and equipping people to derive, discern, and digest information in ways that gird against the influence of fraudulent news. Based on our examination of the range of approaches to fraudulent news that have been employed by governments, social media outlets and technology companies, news organizations, research institutes, and nonprofit groups, PEN America has identified six prongs of response that are critical to stemming the current crisis and averting the most dangerous harms:

For Policymakers, Educators, Educational Institutions, and Education Leaders

Educate the public and future generations by mounting a massive effort to create informed consumers of news across all platforms and mediums:

- Adopt news literacy education as a core part of school curricula.
- Conduct research on the most effective forms of news-related public education and empowerment.
- Engage teacher training programs and graduate education schools to equip teachers to teach news literacy.
- Leverage print, digital, television, and other media platforms with the reach to inform youth and citizens at large on news literacy.

For Technology and Social Media Platforms and Other News Intermediaries

EQUIP the public to distinguish fact from falsehood and to assess the credibility of information:

- Identify purveyors of fraudulent news—clearly and narrowly defined as the purveyors of demonstrably false information that is being presented as fact in an effort to deceive the public—and take steps to ensure that they are not able to sustain themselves and profit from access to advertising services on your platforms.
- Establish an appeal mechanism for owners of web pages or sites that are blocked from ad services or who suspect that their site has been de-emphasized in a platform's algorithms, so that the grounds on which the page was blocked or deprioritized can be reviewed and, if appropriate, reversed.
- Develop additional strategies to ensure that fraudulent news is not presented to users in sections of platforms classified as "news" or that otherwise suggest that the information is credible (like Google's "best answer" feature).
- Invest further in technologies to more quickly and comprehensively identify efforts to artificially boost content through the use of bots or other means, and flag these efforts in a manner that's visible to users.
- Strengthen and expand partnerships with independent fact-checking organizations to feature their work, make it easily accessible to users, and collaborate to reduce duplication of effort in fact-checking particular items.
- Support news literacy initiatives through funding and partnerships.
- · Develop additional ways to offer users content

- that may differ from their own beliefs or views, in ways that are transparent to users and sustain their control over what they see.
- Appoint independent ombudspersons to respond to concerns raised by users, the public, and policy makers, and empower them to explain publicly (and, when necessary, critique) the platform's response to issues of public importance.
- Work in collaboration with academic researchers and civil liberties advocates to identify ways to share more information with researchers about the spread of fraudulent news on specific platforms and the efficacy of efforts to address it, consistent with appropriate privacy protections for users, and free expression rights for news media outlets.
- Allow employees to speak more openly with journalists about the challenges faced in combatting the spread of fraudulent news.

For News Outlets

EXEMPLIFY the values and tenets of credible news gathering and dissemination:

- Continue to emphasize transparency of operations as a high priority, including finding new ways to be more open with readers about the journalistic and editing processes and the handling of errors.
- Clearly label different types of content as reporting, commentary, opinion, analysis, etc.
- Establish, reinstate, and augment ombudsperson functions to underscore transparency, commitment to professionalism, and accountability to readers.
- Prioritize reporting on the harms posed by the spread of fraudulent news and the ways individuals can help.
- Engage proactively in civic and education initiatives to improve media literacy, including outlet audiences and communities.

For News Outlets, Social Media Platforms, Educators, Research Institutes, and Civil Society

ENGAGE directly with diverse groups of citizens to better understand the drivers that influence their interest and trust in the news media:

 Support and conduct research to better understand the drivers of media distrust, the strategies that can foster an appetite for a broad range of



news sources, and the skills to evaluate those sources among news consumers.

- Consider diverse readerships when covering polarizing topics or mounting campaigns to combat fraudulent news.
- Involve authoritative voices from across the political spectrum in efforts to defend press freedom and the role of truth.
- When offering fact-checking, emphasize transparency and objectivity of operations, including explanations of what is chosen to be fact-checked, the verification process, and the reasoning behind sometimes evolving conclusions.

For News Organizations and Civil Society

EXPOSE those who deliberately purvey fraudulent information or baselessly foment distrust of what is true:

Prioritize reporting on the purveyors of fraudulent news, the methods they use to manufacture and spread it, and the approaches under way to curb its spread.

For Policymakers, News Outlets, Social Media Platforms, and Civil Society

EMPOWER individuals with a set of recognized rights that can help counter practices that interfere with informed news consumption:

- Publicly reject all efforts to denigrate the news media or undercut the legitimacy of their work and reaffirm commitment to freedom of the press.
- Explore ways to better protect journalists from being compelled to disclose sources, especially with respect to sensitive national security and criminal justice stories.
- Support efforts by diverse groups of news consumers to mobilize in defense of their own rights to receive and impart in information.
- Educate news consumers to enforce their rights and fulfill their responsibilities.
- Publicly express support for press freedom and respect for journalists.
- Oppose government efforts that would impinge on free expression by penalizing online platforms for failing to remove fraudulent news from their platforms, or by otherwise requiring platforms to act as arbiters of fact.



Introductory Essay

FRAUDULENT NEWS AND THE THREAT TO FREE EXPRESSION

By Suzanne Nossel, executive director of PEN America

he rise of fraudulent news and the erosion of public trust in mainstream journalism, due in part to a deliberate campaign of denigration, pose a looming crisis for American democracy and civic life. A series of factors—soaring levels of mistrust of journalism and the media, an explosion of new online news outlets, rapid changes in patterns of information consumption, sharp ideological divides that dictate which media outlets are trusted by

"Over the past year at PEN America, we have been alarmed and galvanized by the realization that many of the threats to expression that we have historically fought against alongside sister PEN Centers and allied organizations—in China, Russia, Myanmar, Egypt, and elsewhere—have landed at our own doorsteps."

whom, daily attacks on the press by the president of the United States and his allies, and stumbles by the media itself in an era of cutthroat competition and instantaneous transmission of information—combine to call into question existing methods for disseminating and validating the news for and by an information-hungry but skeptical public. At

a time of domestic political upheaval, sharp policy divisions, and intensifying international conflicts, the spread of disinformation and the related—yet distinct—problem of distrust of the media pose a fundamental threat to the quality of our public discourse and to our political system, sound policy outcomes, and national cohesion.

PEN America, an organization dedicated to the celebration and protection of freedom of expression, construes its mission broadly to encompass the defense not just of individual rights to free speech but also of open discourse as the lifeblood of free and vibrant societies. Over the past year at PEN America, we have been alarmed and galvanized by the realization that many of the threats to expression that we have historically fought against along-side sister PEN Centers and allied organizations—in China,

Russia, Myanmar, Egypt, and elsewhere—have landed at our own doorsteps. Insults directed against journalists for doing their jobs, willful intimidation of members of vulnerable groups, attacks on reporters, and crackdowns on protesters have been generated and legitimized by the highest levels of the U.S. government in unprecedented ways. Yet, amid all the serious concerns that have animated PEN America and our 5,000-strong membership of writing professionals, the damage already sustained and the future risk to the very idea of truth in American public discourse stand out as among the most grave.

Dating back to 1948, the PEN Charter, which governs the international network of PEN-affiliated organizations operating in more than 100 countries, commits PEN members to "pledge themselves to oppose such evils of a free press as mendacious publication, deliberate falsehood and distortion of facts for political and personal ends."1 What the PEN Charter called "mendacious publication" was a forerunner to what was initially known as "fake news" (before the White House and others co-opted the term to refer to virtually any critical news coverage) and what PEN America, in this report, will refer to as false or fraudulent news (see the Definition section). The framers of the charter were prescient in recognizing that an open marketplace of ideas can be distorted not only through government censorship, intimidation, or reprisals for speech but also by market failures wrought by the unscrupulous actors and, as we now see, fostered by technology. The framers of the PEN Charter, written in the aftermath of a Second World War fueled by fascism, also realized that the first tool of the autocrat is an assault on truth and fact.

With mendacious publication spreading rapidly in our own country, this aspect of our mission has assumed new urgency as we consider how to protect the bedrock of open discourse—trust, citizens' ability to distinguish fact from falsehood, the opportunity to test competing claims through forthright debate—without which freedom



of expression loses its value. In a climate where individuals expect that the information they receive is as likely to be false as true; where they fear that they won't be believed even when they are telling the truth; and where they anticipate being dismissed by anyone not already predisposed to credit their views, free expression cedes its value. After all, free speech is in a sense the right to persuade, to galvanize, to engage in joint quests for truth alongside others, to reach new understandings, and to shape communities and societies.

Free expression, both in the First Amendment to the U.S. Constitution and as enshrined in international law, encompasses not just the right to speak but also the right to gather and impart information.2 If public discourse becomes so flooded with disinformation that listeners can no longer distinguish signal from noise and simply tune out, the ability to receive and impart information is compromised. In a vacuum of truth, speech loses its potency; it becomes just words. Accordingly, even if most forms of fraudulent news constitute protected speech that cannot and should not-be outlawed or punished, the collective impact of such speech nonetheless poses serious risks to the open and vibrant discourse necessary for freedom of expression to survive and thrive. (It is important to note that this report does not call for legal action to restrict fraudulent news; we do not support giving the government broader power to regulate media content as a solution.)

The problem of proliferating fraudulent news is now compounded by social and political divisions that undercut the traditional ways that truth ordinarily triumphs. Investigations, exposés, studies, expert accounts, eyewitness interviews, and other tools for the elucidation and verification of contested information fall short when a significant population segment is convinced that it cannot believe anything that comes from a wide array of sources it perceives as politically or ideologically hostile. Absent viable methods to bridge divisions about what is true and false, already broad gulfs in perception and dogma widen further.

There is no silver bullet for the problems of fraudulent news and eroding public trust in news and media. Certain dimensions of the problem long predate the current political and technological era-including, for example, the blurring lines between news and opinion, the commercial imperatives that drive news coverage, and broader market forces like media concentration. Other aspects are a function of dramatic changes in the technology, platforms, and behavior patterns inaugurated by the digital age. To usher in a new era in which the American news consumer is informed, equipped, and engaged in accessing a ready stream of trusted information to guide participation in civic life will require a broad series of steps over time, involving grassroots organizations, educational institutions, research institutes, civil society, philanthropy, news and media organizations, and online platforms.

It is our hope in this report to spotlight the dimensions of the problem, call out its serious implications, and stimulate greater urgency across multiple sectors of society that have a role to play in addressing it. We do not claim to have covered all the relevant issues, nor certainly to have all the answers. We are also aware that as we undertake this work, colleagues in numerous organizations are simultaneously carrying out their own investigations and analyses. We are grateful for the chance to engage in dialogue with them as we continue to develop and refine our own contributions. The reshaping of the landscape for news and information is happening quickly and in unexpected ways. Experimentation, innovation, awareness raising, and trial and error will all be necessary before we can be confident that the challenges we face are in hand.

SIGNS OF A CRISIS

Markers of a crisis in the American climate for news and information are abundant. Key indicators of impending crisis include:

Eroding Public Trust in the Media

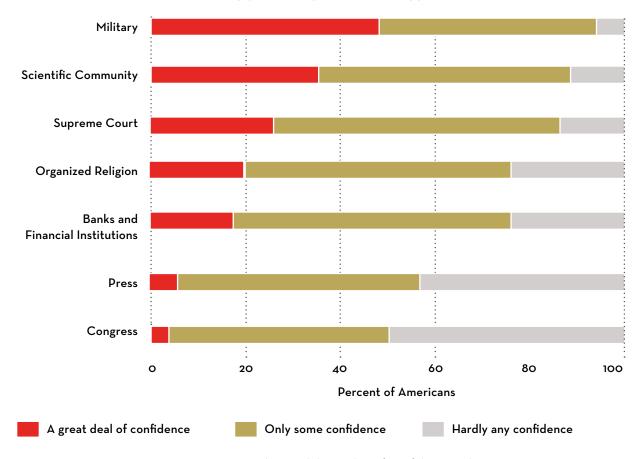
In a September 2016 report, Gallup, which has been polling Americans about their confidence in mass media annually since the late '90s, announced that Americans' trust in the media had "dropped to its lowest level in Gallup polling history." Only 32 percent of respondents claimed to have a "great deal" or "fair amount" of trust in the media, a figure down 8 percentage points from 2015—and down more than 20 percentage points since 1997.3

The United States isn't the only nation facing a skeptical citizenry. In at least 17 countries worldwide, trust in the media has plunged to an all-time low.4 News consumers from Ireland to France to South Korea see the news media as politicized, dependent on social media and clickbait to dictate news agendas, and editorially compromised due to economic pressures.⁵ In the United States, according to an April 27 poll conducted by ABC News and The Washington Post, over half of Americans believe that news organizations "regularly" fabricate stories.6 Americans now trust the military, the scientific community, the Supreme Court, organized religion, and banks and financial institutions more than they trust the mainstream news. The only institution they trust less, according to an April 2016 study by the American Press Institute, is Congress (see chart on page 6).7

Public Confusion About Facts and Issues

The erosion of trust in an institution as old and as layered as American democracy itself has left a chasm out of which perplexity and doubt now sprout. A few months after Gallup published its 2016 report on Americans' falling trust in the media, the Pew Research Center released a survey revealing that 64 percent of American adults felt that fabricated news stories were sowing confusion about the "basic facts of current issues and events." This feeling was widespread across

CONFIDENCE IN THE PRESS



American Press Institute: How Trust Can Be Broken, and the Decline of Confidence in the Press®

education levels, income brackets, and political affiliations. While a large percentage of those polled believed strongly in their own *individual* abilities to discern fake political news items from real ones, a majority of Americans still saw fake news as a persistent online threat.⁹

Adults aren't the only ones confounded by false news. According to one Stanford study, American youth—the most technology-savvy generation ever to come of age—are demonstrating a "dismaying" inability to distinguish fake from real news. Researchers found that a majority of middle school students couldn't spot the difference between an advertisement and a news article; that most high school students accepted photographs as tantamount to fact; and that even a majority of Stanford students couldn't distinguish between a fringe partisan information source and a mainstream one.¹⁰

Even supposedly sophisticated news analysts and public figures are losing sight of the line between false and true news, disseminating false stories and invented data passed as "facts" to widespread audiences. In 2015, Fox News host Sean Hannity reported on air that 250,000 Syrian refugees were going to be settled in the United States," a number that President Trump repeated on the campaign trail—and

an unfounded data point that NBC News later traced to a headline published on a satirical news website. ¹² During the 2016 campaign, Trump presidential campaign manager Corey Lewandowski tweeted a link to a news story headlined: "Donald Trump Protester Speaks Out: 'I Was Paid \$3,500 To Protest Trump's Rally.'"¹³ The headline was bogus; Lewandowski later deleted the tweet, but only after many had seen it. ¹⁴ A third example involved *The Guardian*'s Zach Stafford, who circulated a rumor spread on social media in the days immediately following President Trump's election that several transgender teens had committed suicide in response to the election results. ¹⁵ Stafford soon removed the post, ¹⁶ and the independent fact-checker Snopes.com ruled the rumor "unproven."¹⁷

The Spread of Fraudulent News

False news is widespread and can spread uncontrollably. The Pew Research Center has found that a third of Americans "often" see fabricated political news stories online, while nearly one in four admit to having shared them. (Fourteen percent said they shared something that they knew was fake at the time, while 16 percent said they only realized later that it was fake.)¹⁸



The spread of fraudulent news happens even more quickly and efficiently when it doesn't have to rely on humans. A recent study from Indiana University in Bloomington tracked 400,000 claims made by fraudulent news websites and studied the way they spread through Twitter, collecting some 14 million tweets referencing the fraudulent claims.¹⁹ Researchers discovered that accounts that actively spread misinformation online were significantly more likely to be "social bots" (automated accounts programmed to tweet or post like humans)20 than people. What's more, these bots were deliberately designed to target influential users with a higher number of followers, in order to increase the likelihood of a fraudulent news story going viral.21

During the 2016 campaign, fraudulent news stories were shared and viewed on Facebook at a higher rate than stories published by mainstream news outlets. An oft-cited BuzzFeed News analysis found that in the final three months of the presidential campaign, Facebook's top-performing fraudulent election stories generated significantly more engagement than the top stories from news outlets like The Washington Post, The New York Times, the Huffington Post, and NBC News.²² The 20 top-performing false election stories, published by hoax sites and partisan blogs, garnered more than 8.7 million reactions, shares, and comments, while the mainstream news media's 20 best-performing election stories totaled under 7.4 million engagements.²³ Some of these fraudulent headlines became instant sensations, spreading far and wide across the internet: "Pope Francis Shocks World, Endorses Donald Trump for President" picked up 960,000 Facebook engagements; "WikiLeaks Confirms Hillary Sold Weapons to ISIS" garnered 789,000.24

And then there was Pizzagate, the now-infamous incident stemming from a fictitious online rumor claiming that Hillary Clinton, along with her campaign chairman, John Podesta, was running a child sex ring out of a D.C. pizza parlor. The sensational conspiracy theory, which, after the Wikileaks release of Podesta's emails, was circulated by a number of hyper-partisan and fraudulent news outlets (including Alex Jones's Infowars²⁵), prompted a North Carolina man to travel to the capital armed with an assault rifle and open fire in the accused pizza shop within a month of the 2016 election.26 No one was physically hurt, but the situation illustrated the potentially tragic real-world consequences of fraudulent news.

Fraudulent news abounded in the wake of the October 2017 shooting attack on a country music concert in Las Vegas. An array of distinct hoaxes, each apparently aimed to advance a particular political narrative relating to targets including Antifa, President Trump, and ISIS, gained traction across Google searches, Youtube, and Facebook. Fraudulent news purveyors did not waste a moment once word of the carnage broke, moving swiftly to advance self-serving theories and claims that propagated across the internet, often beating the truth to people's inboxes, search results, and Facebook feeds.²⁷

Frequent Attacks on the Credibility of the Media

Today, the American who holds our nation's highest office uses his bully pulpit to launch near-daily attacks on journalists and the American news media. PEN America's "Trump the Truth Tracker," which follows important developments under the Trump Administration that threaten to undermine free expression and U.S. press freedoms, has documented over 100 examples of the president or his administration denigrating the press since President Trump assumed office on January 20. These include presidential tweets decrying "fake news" and openly branding press outlets "the enemy." In a February 2017 tweet, Trump proclaimed, "The FAKE NEWS media (failing @nytimes, @NBCNews, @ABC, @CBS, @CNN) is not my enemy, it is the enemy of the American people!" He reiterated this claim a week later in a speech to the Conservative Political Action Conference on February 24, stating: "A few days ago I called the fake news the enemy of the people. And they are. They are the enemy of the people." Later that day, he tweeted: "FAKE NEWS media knowingly doesn't tell the truth. A great danger to our country."28

Members of Trump's administration have echoed his disdain for the press. On January 25, Steve Bannon, Trump's former chief strategist and senior counselor, told New York Times reporter Michael Grynbaum, "The media should be embarrassed and humiliated and keep its mouth shut and just listen for a while," adding: "I want you to quote this. The media here is the opposition party."29

With over 40 million Twitter followers, President Trump's words gain global traction the moment they are published. Such frequent and blistering attacks on the news media have gone so far as to prompt serious rebuke from U.N. High Commissioner for Human Rights Zeid Ra'ad al-Hussein. "To call these news organizations fake does tremendous damage," Zeid said this past August. He continued: "I believe it could amount to incitement. At an enormous rally, referring to journalists as very, very bad people-you don't have to stretch the imagination to see then what could happen to journalists."30 Zeid was referencing a broader definition of incitement to violence than is recognized under U.S. law. However, several journalists³¹ and commentators have echoed his concerns that Trump's constant denigration of the press may encourage physical harassment or attacks on reporters.³² Furthermore, a June 2017 Quinnipiac poll indicated that 52 percent of Americans surveyed believe that Trump has changed attitudes toward the news media "for the worse."33

President Trump isn't the only one lobbing repeated attacks on the news media, nor was he the first. "Over the years, we've effectively brainwashed the core of our audience to distrust anything that they disagree with, and now it's gone too far," said conservative radio host John Ziegler, who has become critical of the extreme partisanship promoted by pundits (of which he has been one). In their talk programs, right-wing pundits like Rush Limbaugh, Laura Ingraham, Michael Savage, and Sean Hannity frequently impugn and undermine standard news reporting, attacking the media with claims of dishonesty and being "fake." One Gallup poll tracked the correlation between Republican distrust in the media and the post-2001 proliferation of hyper-conservative talk radio programs after the terrorist attacks of September 11. Gallup found that as the popularity of these shows soared, Republicans' trust in the media declined.

Polarization of Trust in Specified Media Outlets

While distrust in the mainstream media transcends party lines (a May Harvard-Harris poll found that 65 percent of American voters left and right believe there is "a lot" of fake news in the media³⁷), Republican trust in particular has plummeted over the past two decades, reaching an all-time low when last polled in 2016, when only 14 percent of Republicans claimed any confidence in the mainstream media.³⁸ Rising Republican distrust of the media correlates with divergent media consumption habits among liberals and conservatives. A 2014 Pew Research Study found that conservative news consumers were far more likely to rely on a single news source than their liberal counterparts, who sought out a variety of sources. 39 Partisan news-consumption habits played out during the 2016 campaign season, when 40 percent of Trump voters turned to Fox News as their preferred source for updates about the election. There was no equivalent single preferred source among Clinton voters, who chose a variety of outlets for their election coverage. (At 18 percent, the largest cluster of Clinton voters tuned into CNN. 40)

Earlier this year, the Columbia Journalism Review (CJR) published research pointing to an "asymmetric" polarization in online news sharing between Donald Trump supporters and Hillary Clinton supporters. While pro-Clinton audiences shared news stories across a relatively broad political spectrum, including The Wall Street Journal, pro-Trump audiences were significantly more likely to engage with news sourced from highly partisan outlets on the far right—many of which have been around only since the 2008 election. As the CJR researchers summarized, "Over the course of the election, this turned the rightwing media system into an internally coherent, relatively insulated knowledge community, reinforcing the shared worldview of readers and shielding them from journalism that challenged it."

There are also concerning differences between Republicans' and Democrats' perceptions of the news media's biases and freedom to maneuver. A third of Republicans perceive the mainstream media to be "too liberal," while 12 percent of Democrats find it "too conservative." 43 One

NPR/PBS Newshour/Marist poll found that 42 percent of Republicans believe that freedom of the press has expanded too much, while 32 percent of Democrats and 28 percent of independents believe that freedom of the press has become too restricted.⁴⁴

Proposed Solutions with Far-Reaching Implications Are Being Considered and Implemented

One indirect marker of crisis lies in the proliferation of policies and laws being pursued to counter the effects of false news, some of which create new threats to expression. As tech companies and citizen groups across the United States debate how best to tackle the spread of fraudulent news, some nations are already implementing measures that will have far-reaching implications for individual free expression and a free press. In June, the German parliament passed a law requiring social media companies to rapidly take down certain content, including speech that a complainant says violates German defamation or hate speech laws, or face fines as high as 50 million euros if they fail to do so.45 Such measures raise serious free expression concerns and create an incentive for private companies to err on the side of taking content down. Online platforms play host to an ever-increasing portion of global discourse. Indeed, the broad sweep of the law may lead some companies to exclude whole categories of controversial content to avoid triggering penalties. Such laws also force social media companies to become the arbiters of what is or is not legal content, fueling a situation in which censorship becomes privatized and ever more difficult for outside parties to assess or challenge.

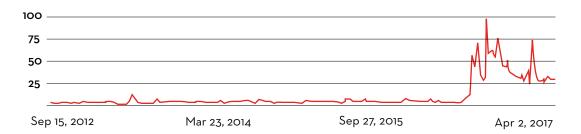
While the impetus for Germany's new law comes partly from an understandable desire to stem the flow of false and hateful rhetoric that might foment violence or civic upheaval, other governments have used the specter of untrustworthy news to justify draconian efforts to suppress the media. 46 Indeed, attacking and prosecuting journalists for spreading "false news" has long been a hallmark of repressive regimes, using laws that criminalize the dissemination of false information to persecute and jail critics and political opponents. 47 New concerns—and heated rhetoric—about fraudulent news are providing new cover for some governments to go after the press.

Cambodian authorities recently ordered the silencing of nearly 20 radio stations seen as critical of the government, repeatedly citing President Trump's criticism of the U.S. media as justification for the decision. In a speech referencing President Trump, Cambodian Prime Minister Hun Sen said: "His rantings are right. I would like to send a message to the president that your attack on CNN is right. American media is very bad." 48

Poland has also used the spread of fraudulent news to justify a recent crackdown on the press. In 2016, Polish President Andrzej Duda (whose right-wing party has been roundly criticized for its attempts to neuter the press)



GOOGLE TRENDS: SEARCHES FOR "FAKE NEWS"53



signed a law placing state-owned media under direct governmental control, claiming the move was meant to ensure that the news media remain "unbiased, objective and credible."49 Where Poland's state media once enjoyed wider editorial independence under the guidance of leaders appointed by a politically independent body, the ruling conservative government now holds the power to dismiss and appoint the executives in charge of public radio and television.⁵⁰ President Duda has since found support from President Trump, who called him an ally in a (tweeted) rallying cry to "fight the #FakeNews," posted after Duda's own tweet referencing @POTUS: "Let's FIGHT FAKE NEWS."51

Intensified Public Debate

Debates about fabricated news have intensified since the 2016 election, generating a national—and presidential—obsession with tracking, discussing, condemning, and arguing over fraudulent news. Google searches for the term "fake news" have skyrocketed since 2016, spiking around the November election (see graph above).52

At the same time, fact-checking initiatives are proliferating. There are now 43 active fact-checking outlets in the U.S. alone⁵⁴ and a total of 126 fact-checking organizations in 49 countries around the world—a striking count given that, just three years ago, there were only 48 active factcheck initiatives worldwide.55 While many fact-checking teams operate within newsrooms, the growth of independent, nonpartisan fact-checking outlets spiked during the presidential campaign, and fact-checking as a practice continues to grow.⁵⁶ Both Google and Facebook now count on fact-checking groups as one strategy in the multifront war they claim to be undertaking to stanch the spread of fraudulent news on their platforms.⁵⁷ (Since partnering with Facebook, fact-checker PolitiFact has logged the existence of at least 201 websites responsible for publishing fraudulent news.)58

Perhaps we need look no further than the White House to witness the full-scale encroachment of fraudulent news into American politics and news. During his first 100 days in office, President Trump tweeted the phrase "fake news" at least 30 times, often in reference to critical stories

published by mainstream news outlets. 59 Through his Twitter attacks, Trump has deftly refashioned the phrase "fake news" into a term to be applied to any information that is disagreeable or unwelcome to him, generating further debate about what fake news actually is. "Fascinating to watch people writing books and major articles about me and yet they know nothing about me & have zero access. #FAKE NEWS!" he tweeted in September.60 A few weeks before that: "Last night in Phoenix I read the things from my statements on Charlottesville that the Fake News Media didn't cover fairly. People got it!"61 With a president consistently tweeting about it and citizens, news organizations, and tech companies attempting to fight back, the debate about fraudulent news will continue to dominate the headlines, spawning a kind of fraudulent news ouroboros wherein national upheaval over fraudulent news fuels the media coverage that in turn fuels the upheaval.

IMPLICATIONS OF THE NEWS AND INFORMATION CRISIS

If left unchecked, the continued spread of fraudulent news and the erosion of public trust in the news media pose a significant and multidimensional risk to American civic discourse and democracy, building gradually over time. These developments have already conspired to create a trust deficit in which many Americans credit few, if any, sources of news. Left unaddressed, this diminished trust will have far-reaching implications for American governance and society, undermining the news media's role as the fourth estate and an important check against infringements of civil liberties. While not all of these implications are inevitable, and their severity hinges on a breadth of factors, it is worth explicating these potential repercussions to appraise their seriousness and mount a commensurate response. The experience of societies around the world that have grappled with these challenges in varying contexts suggests that even those implications that now seem farfetched should not be excluded from consideration.

A Poorly Informed Citizenry

An informed citizenry is the bedrock of democracy.

Citizens need access to accurate information in order to make sound decisions at the ballot box, protect their interests, receive societal benefits, effectively advocate for themselves, and contribute to society. As James Madison put it: A "popular government without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy; or, perhaps, both. Knowledge will forever govern ignorance; and a people who mean to be their own Governors, must arm themselves with the power which knowledge gives."62 If citizens are confused about what is true, who and what to believe, and how to find answers to important questions, their role in democracy—and the democracy itself-is undermined. Citizens who lack the means to discern the truth will eventually lose interest in the quest out of a sense of futility. Their desire for civic awareness dulls in the haze of disinformation. Detached

"This is why authoritarian leaders strictly control the flow of information, prohibiting independent media outlets and information sources. They want to prevent citizens from gaining the information they need to become an effective force in shaping the future of society."

and unable to marshal credible information, they lose the ability to effectively advance their own needs, interests, and values. Their worlds collapse inward, focusing on what they can control and in turn signaling to the powerful that their authoritarian instincts will be left unchecked.⁶³ This

is why authoritarian leaders strictly control the flow of information, prohibiting independent media outlets and information sources. ⁶⁴ They want to prevent citizens from gaining the information they need to become an effective force in shaping the future of society.

Unending Political Polarization and Gridlock

If current trends continue, Americans' increasingly polarized political opinions and media consumption habits are likely to harden. If people are exposed only to information that originates from politically aligned sources, they will increasingly lose the ability to see issues from opposing sides, to feel empathy for those differently situated, and to conceive solutions that bridge disparate interests. Sharp political polarization, in turn, poses a host of risks for American democracy and society. When policy makers are politically split, important decisions can become impossible to make, leading to delay and dysfunction. In a deeply polarized climate, interest holders seek to entrench their wants and powers through structural changes to political procedures, voting rules, and governing institutions. Such measures fuel a sense of alienation among the voting public, who come to believe that they lack the ability to advance change at the ballot box or otherwise.

Undermining of the News Media as a Force for Government Accountability

Without media outlets that enjoy broad public trust,

government accountability is compromised. Going back to the early days of the republic, the framers of the constitution recognized the essential role of journalists in exposing public corruption, analyzing political interests and motives, and spotlighting hypocrisy, dishonesty, and other forms of official malfeasance. A free press has been a wellspring feeding the vitality of American democracy, helping to weed out unscrupulous and ineffective leaders and to catalyze progress. The ability of journalists to perform this vital set of roles hinges on public trust. If investigations, exposés, and revelations are not credited by a public that has lost its sense of what to believe, the media cannot perform its watchdog function. Revelations lose their sting, and leaders are immune from accountability for even the most egregious actions. The erosion of trust in the media among even a small segment of voters can have severe political implications, with leaders retaining power and influence despite credible revelations of self-dealing, incompetence, or other forms of malfeasance.

Long-Term Risk to the Viability of Serious News

If a rising generation lacks the ability to clearly discern which news and information can be trusted, and does not ascribe value to news sources that engage in reporting, investigation, editing, verification, fact-checking, and other hallmarks of serious news, the ability of these outlets to find an audience and survive financially will be in jeopardy. News outlets are already buffeted by a breadth of economic challenges, including the downfall of print advertising with the rise of the internet, changes in consumer news-consumption habits, and heightened competition from multiplying cable and online news outlets and platforms. Some of their responses to these pressures have regrettably contributed to eroding their credibility and to their vulnerability to attack by those aiming to impugn the media's motives and competence. There is risk of a vicious cycle in which waning public trust in the media begets ever more ardent pushes for clicks and eyeballs, privileging sensationalist forms of journalism that only feed the crisis of legitimacy.

Inability to Devise and Implement Fact and Evidence-Driven Policies

If publicly disseminated facts and information are distrusted, public policy debates are impaired. The news media plays a vital role as a purveyor and arbiter of facts that inform a wide range of policies in areas including the economy, health care, education, immigration, and foreign policy. Professional journalists amass, evaluate, and explain information obtained from data sources, politicians, and experts; parse the motives and methods of these various sources; and work to reconcile overlapping and competing information in order to discern truth. These functions are ever more essential in an era when voluminous data on every facet of society is increasingly available. Absent public



trust in the media to serve as an informed intermediary to help citizens and policy makers interpret and validate data, policy debates risk descending into unmediated campaigns for influence among lobbying groups and other interested parties. Amid untrammeled influence peddling, those who spend the most money receive the best outcomes, without regard for the public interest.

Vulnerability of Public Discourse to Manipulation by Private and Foreign Interests

The role of the media as a check on power, and a force for accountability, applies not only to our government but also to private actors and foreign governments. At a time of dramatic consolidation in the technology and telecommunications industries, soaring wealth inequality, unfettered private spending on political campaigns, unprecedented consumer data collection, and rapid advances in far-reaching technologies including artificial intelligence, the media's role in holding private capital accountable is essential to combating a new era of robber barons who enjoy unfettered influence over every aspect of American life. At the same time, foreign governments have potent new tools and, in some cases, manifest willingness to intervene in American political, economic, and cultural life to further their own interests. While the news media is not equipped to act as the sole driver of accountability for either the private sector or foreign governments, its role in this regard is more powerful than that of any other actor. Absent press freedoms and widespread public outcry, widely substantiated charges of Russian attempts to interfere with the 2016 U.S. presidential election could have been suppressed by the Trump White House without regard for the long-term consequences for American democracy or U.S.-Russia relations. A news media that is hobbled by public mistrust cannot mobilize the outrage necessary to check even the most egregious abuses and attacks on the integrity of the U.S.'s political system, economy, culture, and society. Revelations that might once have been explosive could fall on deaf ears; objective and factually grounded accusations may fall to self-serving rebuttals. The result will be that those with the determination and money to advance their interests will have a major obstacle—in the form of media scrutiny—cleared out of their way.

Risk of Panics and Irrational Behavior

When news consumers lose their sense of what information to credit and what to dismiss, they are vulnerable to attempts to induce panic. A trusted news media plays an essential role in investigating and validating claims and information that are an impetus for action. Accurate media reports also help to prevent the public from acting on bogus information and being susceptible to deliberate manipulation. False claims regarding health and safety can lead to wasted money and ineffective and unsafe treatments; they can affect the spread of disease and the ability to curb contagions. False or incomplete information about criminal activity, terrorism, or other threats, including drugs or pandemics, can lead to witch hunts that target the innocent, infringe on civil rights, impose vast and wasteful economic costs, and inflame social divisions. The media plays an essential role in examining the factual bases of the claims that can fuel public anxieties, helping to ensure that claims in public discourse rest on a foundation of evidence and, where they do not, invalidating them and helping to restore calm. When a situation of panic does arise, the news media is vital in helping to support a society-wide response by, for example, disseminating information about what the government is doing to address the crisis. Absent widespread trust in the media, panics are more likely to happen and to be more difficult to contain.

Challenges in Actual Emergency and Crisis Management

In addition to the danger of irrational panics, the surge in fraudulent news can compromise our ability to respond to emergencies and crises. At times of peril, the news media plays a pivotal role in disseminating information and publicizing government directives that can mean the difference between lives saved and lost, and vast amounts of property damage avoided or sustained. In natural disasters such as hurricanes or earthquakes, pandemics or other health scares, or national security crises, the public, officials, and civil society leaders depend on the media to keep people informed, give guidance, allay fears, and manage complex response efforts. If major media outlets are distrusted, the ability of local, state, and federal governments-including first responders-to effectively mitigate and respond to catastrophic events is compromised. In the late summer of 2017, hoax stories about major hurricanes were widely disseminated online, sowing confusion about who was in the path of the storm and what they could expect.65 The Federal Emergency Management Agency created a rumor-busting page to help address the problem of people acting on misinformation.66 Families of victims of the 2013 Sandy Hook School shooting and, more recently, the Las Vegas mass murder report being traumatized by the proliferation of fake news reports denying the incidents.⁶⁷ Further proliferation of fraudulent information and erosion of trust in news could add significant challenges to already complex and difficult emergency management efforts.

A Plague of Cynicism

Above all, the difficulty in distinguishing between fact and falsehood breeds cynicism. The counterweight to cynicism is idealism-confidence that certain things can be relied upon, assured, and invested in without fear of betrayal. The founding of the United States was premised on a set of ideals centered on democracy and freedom that inspired the framers of the constitution. These ideals were, without question, imperfectly implemented and, until later amendments, excluded both enslaved people and women from their vision of democracy. Still, these principles have imbued future generations with a sense of pride in striving toward a more perfect union, a fealty to trying to uphold those foundational precepts, and a belief in attaining fair and benevolent laws, policies, and social norms. If it is impossible to distinguish between those who purvey information for the purpose of personal or political gain and those who are committed to the objective and credible quest for facts and truth, people gradually can only assume that every journalist, editor, and media outlet is driven by a self-serving agenda and that none are better than any other. Over time, as has happened in authoritarian regimes, this cynicism bleeds into alienation and apathy. As the Russian-American journalist Masha Gessen reminds us, "Autocratic power requires the degradation of moral authority—not the capture of moral high ground, not the assertion of the right to judge good and evil, but the

"Pinned beneath the weight of so much uncertainty, people lose interest in government, civic life, and democratic participation because they are convinced that the whole enterprise is a veil for self-dealing, that any professed ideals are empty words." defeat of moral principles as such."68 Pinned beneath the weight of so much uncertainty, people lose interest in government, civic life, and democratic participation because they are convinced that the whole enterprise is a veil for self-dealing, that any professed ideals are empty words.

Government Overreach and Strongman Tactics

When trust in media is undercut and the press's role as a watchdog is undermined, leaders who are unconstrained by their own scruples possess little incentive to behave honorably. Even for leaders with a strong sense of conscience, the presence of a robust press corps can provide valuable ballast, helping to fortify against the inclination to cut corners or make trade-offs that cannot be justified to the public. When media is deeply distrusted, the temptations of power and greed can run unchecked; leaders can take refuge in the knowledge that if they are called out, they can simply cry "fake news" to deflect the allegations.

IS FAKE NEWS A FAKE CONCERN?

There are several lines of argument that have been advanced in recent months to the effect that concerns about fraudulent news are overstated. Some commentators, inevitably, will dispute that the spread of false news and the impugning of the news media's credibility amount to a crisis. These arguments deserve consideration.

The Cure May Be Worse Than the Disease

Some proponents of free speech have raised the concern that a sense of alarm over the spread of fraudulent news could be used to legitimize overweening efforts by governments, social media platforms, and others to curb open expression in the name of combating the proliferation of falsehoods. This is a valid concern and one to which PEN America, as an organization dedicated to protecting freedom of expression, is sensitive. While many facts are observable and verifiable, other factual debates are complex and nuanced, and lines between opinion and fact can sometimes blur easily. The prospect of empowering governments, or omnipresent social media platforms and tech companies like Facebook and Google, to arbitrate between competing claims of fact on behalf of the whole world is frightening. A thriving media ecosystem is one that is organic, where many competing narratives that aspire to accuracy vie with one another so that truth is gradually revealed. Empowering the government or mammoth corporations to subsume the role of the marketplace and discern for us what is true and false would arrogate vast power to the hands of the few. It could exclude important ideas from public discourse, manipulate debates to serve particular political or financial interests, and stymie the evolution of ideas in ways that stunt social and political progress. These concerns are partially validated by, for example, Germany's new law imposing harsh fines for sites that fail to remove fraudulent news.

That fighting fraudulent news too aggressively can jeopardize free expression does not mean that we shouldn't fight it at all. Just because there is no easy or optimal solution doesn't make the rise of false news or the erosion of truth any less of a problem. In this report we set out to examine the breadth of solutions that have been tendered to address the problem of false news, focusing our recommendations on approaches that address the dangers of false news without chilling speech.

The Media Is Alive and Well

Some commentators minimize the risks of fraudulent news by pointing to signs that the outlook for the American media has improved in 2017. They note that the work of journalists and news organizations has newfound salience in a fraught political climate and that subscriptions and viewership are up. They point out that journalists are breaking major stories and providing a steady drumbeat of critical scrutiny of the workings of government, policy making, and foreign affairs. News outlets are investing and hiring. These signs of vigor, the argument goes, are reason to take comfort that the media as we know it will survive. Yet not all news organizations are hiring and expanding. Many still have not figured out a sustainable business model in the digital age. The modest signs of renewed vigor in a long-challenged news landscape do not outweigh the risks posed by false news and long-term declining trust in the media. It is far from clear that the surge in readership and viewership reflects a broadening of their audiences politically or ideologically. Rather, partisanship may be whetting the appetite of news consumers to read and hear more



news that they credit and that comports with their belief systems. The current bounce in audience or revenues should not blind executives, editors, journalists, and concerned citizens to the risks that, over time, the stature of these outlets and the information they provide are at risk of significant diminution with far-reaching consequences.

Business as Usual

Some commentators argue that today's deficit of trust in the media and the pitched tenor of discourse about the press's role simply come with the territory of a politically feverish moment. Attacks on the press are, after all, protected by the First Amendment. Every president tussles with the press corps. The media gets plenty of things wrong and deserves to be called out for it. Fraudulent news stories are simply a modern successor to the old yellow press that once helped spark the Spanish American War, and a cousin of the outlandish tabloid headlines that have long sparked intrigue in supermarket checkout lines. Accordingly, some conclude, while fraudulent news may be distracting and misleading, it doesn't rank as a major concern. While it is comforting to think that the current crisis of news may be transitory or subject to a natural correction, this is a case where past may not be prologue. Media consumption patterns are changing rapidly and irreversibly, the business model for traditional journalism is crumbling, public trust in the media has been in decline for decades, and the democratization of media and changes in the technical manner in which media is disseminated and consumed means that the American appetite for yellow journalism may be more easily fed. These factors indicate that even if the current moment's political upheaval dissipates over time, the media landscape is unlikely to return to its status quo ante.

ADDRESSING THE CRISIS OF TRUTH

Like most complex problems, the spread of fraudulent news and rising distrust of the media are not subject to a single, much less simple, solution. Some dimensions of the problem are closely associated with the current White House and its daily attacks on the press for unfavorable stories. An end to President Trump's daily drumbeat of mostly baseless attacks would certainly help to curb public mistrust of the media. But there are also dimensions that go far beyond one president and political moment, warranting sustained mobilization and focus to fortify the role of facts, truth, and information at the foundation of American democracy.

While much of the debate over solutions has focused on the role of government, news outlets, social media platforms, and civil society actors like fact-checking groups, the power of fraudulent news lies ultimately in the minds of the beholders-namely, news consumers. The inhabitants of a democracy must be empowered agents who consume information in intentional and sophisticated ways. Accordingly, measures to address the crisis of truth should first and foremost center on enabling and equipping people to derive, discern, and digest information in ways that gird against the influence of mendacious publication. Based on our examination of the range of approaches to fraudulent news that have been employed by governments, social media outlets, news organizations, research institutes, and nonprofit groups, PEN America has identified six prongs of response that are critical to stemming the current crisis and averting the most dangerous harms. They will be described briefly here, elucidated in the body of this report, and summarized in a set of concluding recommendations.

We have also set forth a News Consumers' Bill of Rights and Responsibilities to reflect and push forward our view that empowered citizens are the ultimate solution to resolving the crisis of trust. We view the rights contained in this draft "bill" as rooted in the free expression rights contained in U.S. and international law, which include not just the right to speak freely but also the right to impart and receive information. Changes in the media landscape require the elaboration of these rights so that citizens have the information and tools they need to receive information conscientiously with the will and ability to weigh its credibility. These rights also relate to how news audiences digest the content conveyed by media outlets and online platforms as informed consumers rather than passive, pliant eyeballs to be monetized. If news organizations and social media platforms are serious about their claims to bear a social responsibility to impart information, enable meaningful connections, and empower citizens, upholding these rights can help them to fulfill those aspirations.

Recognizing fraudulent news as a threat to free expression should not be employed as a justification for broad new government or corporate restrictions on speech, measures whose effects would be far more harmful to free speech. Unscrupulous profiteers and political opportunists may never cease in their efforts to infect the global information flow of information to serve their purposes. The best prescription against the epidemic of fake news is to inoculate consumers by building up their ability to defend themselves.

Educate

For those who accept that the ability to follow and understand the news is vital to an informed citizenry, the need for a massive effort to expand news literacy should be self-evident. In years past, sources of news and information were finite, with the marketplace performing a powerful role in credentialing sources. With few television channels and finite numbers of newspapers, magazines, and book publishers, news had to pass muster with gatekeepers like editors, fact-checkers, broadcasters, and publishers before it was disseminated. Credentials and expertise were must-haves to even submit work for possible publication. While every era included certain media outlets driven by sensationalism and an unconstrained drive for profits, some of their worst impulses were kept in check with legal prohibitions against slander and defamation.

For schoolchildren, the very fact that something was available to be read—in a textbook, library book, magazine, or newspaper-usually meant that multiple editors had reviewed and checked it, deeming it fit for consumption. Children could be taught to read and interpret news and information without needing an array of tools to help them discriminate among an endless array of sources, appraise the motives of writers or publishers, divine credibility from context, and make thoughtful decisions about whether and how to share information. This is not to suggest the system was anything close to perfect: privilege, power, tradition, and orthodoxy shaped an often blinkered received wisdom on many topics, excluding alternative perspectives and stories and sometimes elevating falsehood into accepted fact. But the problems of distortion inherent in any system of publication and information dissemination have metastasized along with the sources of information and news now available. The added layers of explication and analysis of news have always yielded important nuances necessary for sophisticated understanding and are ever more essential to a process that was once as simple as picking up a newspaper or tuning in to the nightly news. Gatekeeping functions once performed by news organizations are now, for a vast range of information sources, outsourced to the consumer, who receives information online in a raw, uncredentialed form and is left to decide what to make of it.

Sweeping transformations in the breadth of available information and in how it is consumed necessitate equally dramatic changes in how we prepare citizens for the information landscape they inhabit and ensure that they can navigate it in informed and intentional ways. Just as computer skills—and now coding skills—are increasingly seen as fundamental to students' ability to succeed, so news literacy skills have become indispensable to national cohesion and competitiveness.

Expert organizations that have developed news literacy curricula and successfully piloted them in specific school districts should seek opportunities to expand those programs, training all children to understand the news and

THE SIX DIMENSIONS OF ADDRESSING THE CRISIS OF TRUTH

For Educators, Educational Institutions, and Education Leaders	Educate the public and future generations by mounting a massive, national effort to create informed consumers of news across all platforms and mediums.
For Social Media Platforms and Other News Intermediaries	Equip the public with tools to distinguish fact from falsehood and to assess the credibility of information.
For News Outlets	Exemplify the values and tenets of credible newsgathering and dissemination.
For News Outlets, Social Media Platforms, Educators, Research Institutes, and Civil Society	Engage directly with diverse groups of citizens to better understand the drivers that influence their interest and trust in the news media.
For News Organizations and Civil Society	Expose those who deliberately purvey fraudulent information or baselessly foment distrust of what is true.
For News Outlets, Social Media Platforms, and Civil Society	Empower individuals with a set of recognized rights that can form the basis for a news consumers' movement that puts the power to combat fraudulent news in the hands of individuals.



determine what information they find believable. While scalable online tools can play an important role, they are no substitute for mandated and dedicated classroom time devoted to news education. With students spending many hours each day on the internet and social media sites where news and information are traded constantly, instruction in the basics of how to utilize and assess such inputs should be a primary focus in the classroom, accorded weight commensurate with other core courses.

Educational leaders, public officials, and foundations should champion news literacy and insist that education organizations both public and private embrace it as part of the quest for excellence. State-level efforts to mandate news literacy education are a promising step that can help to quickly achieve scale. News literacy curricula can supplement and complement the critical-thinking skills that schools seek to impart by teaching literature, social studies, math, and science. They can be integrated with other subjects so that students can use the knowledge and skills developed across the curriculum-like the ability to parse statistics, or detect bias in the use of language—to help them discern which information warrants their trust. Media outlets across print, television, video, and online should be engaged in spreading news literacy skills as a public service. But the adoption of news literacy classes and tools is only a first step: Education professionals and public servants alike must monitor the implementation of these initiatives, both to evaluate which approaches are most successful and to better understand their long-term effectiveness. The goal should be to prepare generations of students to look critically at information and its sources and know how to get their questions answered.

Equip

All corporate participants in the news and information industry have an obligation to equip consumers with adequate tools to validate information that is presented to them. News organizations need to be transparent about sources of information, reporting methods, corrections, and conflicts of interest so that consumers can evaluate what to believe. Even as the internet enables the publication of all kinds of reports that would never have passed muster in the controlled ecosystem of network news and print newspapers and magazines, it can also enable quick and easy (if not foolproof) authentication. Links to primary sources, alternative accounts, and credible fact-checking outlets can enable consumers to credit information not just because it has been offered but because it is backed up with corroborating sources that they can assess for themselves.

Google and Facebook are slowly awaking to their role as leading conduits of news for Americans and people all over the world. They are right to recognize that in an environment of information overload flowing through their channels, it is not enough to leave it solely to the consumer or the marketplace to sort and discern. Fact-checking partnerships and efforts to prevent willful purveyors of false news from profiteering on online platforms are important steps but need to be expanded. Given the fast evolution of the information landscape and the constant emergence of new methods to purvey and profit from false information, both Google and Facebook should be much more transparent about their efforts to target this problem, while recognizing the need to avoid disclosures that would enable fraudulent news opportunists to game the algorithms and evade safeguards meant to thwart them.

Powerful online platforms also need to be cognizant of their role as the digital equivalent of a town square, meaning that ideas that are excluded from circulation on these platforms can be virtually banned from public consumption. This is why the emphasis for these companies should lie in better equipping consumers to exercise their own powers of discernment, rather than in banning or punishing content. Their aim should be to strengthen the marketplace for information so that it works more effectively to sift and exclude fraudulent or false information, not to flatly prohibit it. This role of internet platforms—as private stewards of what is increasingly seen as a public good-underscores the need for transparency, accountability and inclusive dialogue in attempting to tackle the issue of false news.

As information conduits, internet platforms play multiple roles with distinct implications. When Google puts something in its news feed, it is declaring it to be "news." Information that comes up in a Google search result, by contrast, is proffered simply as something that exists on the internet, posted by someone. It carries no promise of accuracy, a point that needs to be underscored in information literacy curricula. More complicated issues arise when Google suggests that a certain result is the "best" answer, or when Google autosuggests a particular query: Such actions may imply some degree of endorsement, though not as much as an item in the Google News aggregator. Likewise, Facebook plays a different role when it curates a news feed or a trending news section than when it simply allows account holders to post at will.

When platforms make content-neutral forums available for the posting of information by others, they should be permissive in allowing as broad an array of content as possible, largely avoiding judgments of taste or truthfulness. In this function, their role is close to that of a telephone or email service provider that does not evaluate the truthfulness or lawfulness of its customers' conversations before allowing them to be made across the network. But when platforms publish or aggregate content for consumers through news feeds, favorites, or recommended answers to questions, their role may be more analogous to that of a publisher exercising judgment on whether information can be trusted or is worth knowing. When a platform places its corporate imprimatur on content, it should be confident that it can stand by it.

Platforms also bear special responsibilities when they act as business partners and vendors, selling their consumer base for profit. Having asked consumers to trust them with vast amounts of personal information, platforms owe it to them to protect this information from misuse and to carry out the due diligence to ensure that their business dealings are consistent with their professed corporate values. When the business involves selling consumers' attention and time, platforms ought to make certain they know who is doing the buying, be it a political campaign, an advocacy organization or a foreign government. When there are lapses and platforms learn after the fact that they have been infiltrated by dishonest or fraudulent advertisers or content partners, they should investigate, publicly disclose their findings, and explain how similar intrusions will be averted in the future (consistent with appropriate privacy protections for users).

When content and search algorithms privilege certain content at the expense of others, balancing the value of offering open platforms for expression with the duty to avoid knowingly presenting intentionally deceitful information becomes tricky. It seems relatively straightforward to say that Google should not accept ads from Holocaust denial publications but that such publications—as vicious as they are-should not be excluded entirely from being retrieved through a purposeful search query, for example by a scholar who studies Holocaust denial theories. But it is harder to determine when and to what extent such information should turn up in searches when it isn't specifically sought out—when a user is googling the Holocaust rather than Holocaust denial. Should Google and Facebook make Holocaust denial information hard to find for all save those deliberately seeking it out? If so, then what about other controversial ideas, such as Russian propaganda, climate change denial, or creationism? While we don't have definitive answers to these dilemmas, greater public debate and transparency can help the public understand how to find the information they seek, as well as the importance of engaging with information they may unintentionally encounter.

Exemplify

Legitimate news organizations embrace various standards of journalistic and editorial integrity—news that is reported, checked, proffered free from conflicts of interest, and, if necessary, corrected for accuracy. Yet a broad array of pressures can compromise their ability to fulfill these promises. In an environment in which the credibility of news is contested on a daily basis and the trust and faith of future generations of news consumers hangs in the balance, news organizations need to reexamine how they can best exemplify the news standards they proclaim.

One challenge news organizations face is the porousness of what constitutes news. While we might agree that reported stories on breaking political or policy developments, crimes, or extreme weather undoubtedly constitute news, much of what appears in news outlets today bears only passing resemblance to that. Cable news networks devote endless hours to what might be dubbed "talk television"-a counterpart to talk radio in which anchors and guests ruminate on current affairs. Such discussions often include reporters as participants. Sometimes such reporters share information from their reporting, but just as often they volunteer analysis or opinions based on their expert knowledge of stories they are covering. Cable panels of talking heads often include a mix of reporters from mainstream news outlets alongside opinion writers, representatives of right- or left-leaning media organizations, and affiliates of political campaigns or parties. With six or more participants side by side on a panel or in aligned boxes on screen, it can be virtually impossible for viewers to understand whether panelists are speaking as reporters or as commentators, and whether they are officially representing their news outlet, much less how to evaluate the veracity of various claims and assertions.

While such a mix can make for lively television, it is not hard to understand why a skeptical consumer tuning in to "the news" would be confused about what to believe. Networks should draw clearer lines between reported news, analysis, commentary, and discussion, distinguishing between speakers and segments of shows to make clear what is and isn't reported news. The increasing participation of news reporters as cable news commentators reflects the effort of news organizations to promote star reporters as individual "brands" who can help attract consumers and enhance the visibility, prestige, and influence of the media outlets that employ them. Whereas most major news outlets allow their reporters to accept speaking engagements, on television or otherwise, they are not necessarily transparent about company policies regarding compensation and the manner of appearance. NPR has clear employee speaking standards posted to their website ("If you wouldn't report it on NPR, don't say it in public elsewhere") but they also allow employees to receive honorariums.⁶⁹ The New York Times lists nothing about speaking appearances in its publicly facing "Guidelines on Integrity," 70 and The Washington Post makes onlya passing mention ("no speaking engagements without permission from department heads"71). If reporters are going to offer their personal opinions or receive outside payment for their expertise, the nature of their participation in the discussion should be spelled out clearly and distinguished from their role and work as a reporter.

Another challenge posed by the effort to build up the visibility and influence of journalists relates to their personal participation in social media. While journalists are well-placed to offer informed commentary on events







Two fraudulent news items

they cover and are, of course, entitled to their own opinions, news reporters should avoid offering commentary that can call into question their objectivity in covering the news. The temptation to offer colorful, pithy, and timely commentary poised to go viral can sometimes override the sense of restraint required to maintain journalistic credibility. Such posts can feed criticisms that news reporting is colored by bias and should not be believed. News organizations should provide guidelines and examples that help enable journalists to maintain a consistent professional voice in their participation in publicly available social media platforms.

All news outlets are not created equal. The editorial judgment exercised at BuzzFeed need not match exactly that at The New York Times. But when outlets make borderline calls on issues of sourcing or verification, they should be transparent about their decisions, the steps taken to verify the information, and ongoing efforts to attain incontrovertible facts.

With faith in mainstream journalism on the line, now is not the time for news outlets to cut back on fact-checking, reader ombudspersons, public editors, or other mechanisms that ensure accountability to readers and the truth. Errors, even when corrected, fuel critics hungry for evidence that real news is actually fake. The competitive media landscape fuels the drive for speed, scoops, and clicks, sometimes at the expense of accuracy and adherence to established procedures. In the current climate, one big media scandal could be a near-mortal blow, undercutting the ability of the whole news sector to win the trust of a rising generation of skeptical consumers. Media outlets should take steps to expand transparency in how stories are reported and how contradictions or corrections are being dealt with. While accountabilityincluding disciplinary measures for staff that fall short of standards-is appropriate, it should be accompanied by openness about the nature of errors and steps being taken to prevent them.

Engage

Because an informed news consumer is the most important force in helping to overcome a crisis of fraudulent news and media distrust, the efforts of news organizations and platforms to behave responsibly amid these challenges must include active outreach to diverse groups of consumers to understand how they receive and process news. To the extent that interest in the truth is being sidelined, overridden, or thwarted among certain populations, we need to understand why in order to formulate an effective response.

The crisis of truth is not one that can be solved by shoring up the support of liberals for the media outlets they already know and love. It requires outreach, dialogue, and an exploration of the breadth of attitudes toward media and information that lead Americans to choose how and where to tune in and what to believe. Just as political and civic organizations are pushing themselves to move beyond their traditional bases and better understand how to reach racially, geographically, politically, and ideologically diverse constituencies, so should news and information outlets. While serving a core constituency of consumers may make good business sense, it risks betraying the social purpose of news outlets to inform the public at large. It also fails to address the danger that a population segment that feels disenfranchised by mainstream news has the potential to influence the polity writ large in ways that could imperil the mainstream media's viability.

While hiring conservative columnists and aggregating diverse viewpoints culled from other sources may be helpful in building a more ideologically diverse audience, news and information outlets should not assume this is enough. More research, from a variety of perspectives, is required to help the public at large better understand new patterns of news consumption and how to prevent our fast-changing news ecosystem from buckling beneath the weight of polarization and mistrust. News outlets and internet platforms should reach out to diverse consumers through surveys, focus groups, interviews, and dialogue to better comprehend what they tune into and why, what they look for in news outlets, and what builds and undermines their trust. Because part of the role of both news outlets and online platforms should entail exposing consumers to a breadth of views and ideas, outlets should explore what it will take to coax consumers outside the information bubbles that they inhabit and how to present alternative perspectives in ways that can break through.

Expose

The surge of fraudulent news is not innocent. Profit seekers, political opportunists, and power mongers have adopted sophisticated tactics to manipulate the flow of information and deceive consumers, hiding behind free speech protections. They will keep it up as long as they can get away with it. Self-serving actors need to be exposed, their motives and tactics laid bare for the public to understand. Revelations concerning, for example, how the Pizzagate disinformation or Russian propaganda spread during the 2016 campaign have provided essential information to help reveal the dimensions of the crisis. Google and Facebook have critical roles to play in helping to unearth those who game the system and should make information on malfeasance available to journalists and researchers who can unpack fraudulent tactics and find out who is behind them. Neither trade secrets nor user privacy are valid grounds to protect those who deliberately exploit the American public through campaigns based on deliberately false information. When consumers are asked to put their trust in a platform, they must know that those who abuse that trust at their expense will be exposed and held accountable. News organizations should devote resources to investigating the shadowy networks that propagate fraudulent news and the ways consumers can be deceived and manipulated. This includes the surging trend of privately funded newsgathering, supported by foundations and, in some instances corporations or individuals. It also includes scrutinizing the studies, reports and data that can underlie the news headlines but can be subject to manipulation by interest-holders seeking to sway public opinion. Funders and advertisers who power unscrupulous news outlets and sources should be out in the open. Exposing the myriad forces behind the looming crisis of fraudulent news and distrust in the media will be time consuming and expensive, but it is essential.

Empower

Ultimately, all these measures aim to build an empowered constituency of news consumers-cutting across geographies, ideologies, and political persuasions. Consumer habits, viewing patterns, and attitudes will shape whether the fraudulent news epidemic spreads uncontrolled or can be quarantined and cured. Empowered news consumers have the right to receive credible information, to know who is behind the information being provided, and to be aware of conflicts of interest, errors, and other forms of misinformation. They need to know what they can and should expect from news organizations themselves and from the platforms that serve as primary conduits for news. They need to know how to assert these rights and to challenge infringements on them. They need to value these rights and make informed choices to consume information from outlets that understand and respect the role and rights of the news consumer.

Empowered news consumers also have certain responsibilities. The free-wheeling culture of the internet and social media makes all of us purveyors of information. While we may disavow the idea that information that we share, forward, or tweet reflects our opinions or constitutes a mark of validation, such associations are impossible to avoid entirely. News consumers need to weigh information before they credit or share it, preventing themselves from serving as unwitting conduits for deceit and disinformation.

These rights and responsibilities are further elaborated in the PEN America News Consumers' Bill of Rights and Responsibilities. That is intended as a living document that helps articulate and implement measures to empower news consumers as the primary force in defense of facts and truth in public discourse. It is our hope that they will help foster a movement of news consumers who band together to apply a critical eye to the news outlets, platforms, advertisers, and corporate interests plying them with information through every imaginable channel. An organized consumer campaign to demand that news sources live up to their responsibilities, provide research and data about who is purveying and profiting from deceptive news, and to advocate on behalf of news audiences as new technologies, algorithms, and products are introduced is the best way to inoculate the public against the dangers of fake news without impairing individual rights to expression. The role of such a movement would not be to inculcate faith in the truth, but rather to instill skepticism, curiosity, and agency that can propel news consumers to protect themselves.



DEFINING FRAUDULENT NEWS

The suggestion that in order to understand a problem, it is necessary to define it, is particularly the case for "fake news," a term that has been appropriated by various actors—including, notably, President Trump—for the purpose of discrediting negative press coverage. For this report, PEN America is focusing on what we are labeling as "fraudulent news," defined as: Demonstrably false information that is being presented as a factual news report with the intention to deceive the public.

For the purposes of this report, fraudulent news does not refer to good-faith mistakes, news reports that may be considered to reflect a particular bias or worldview, or editorial decisions to focus more on one particular issue than another.

The majority of fraudulent news content (whether text, video, audio, or photographic) falls into one of three categories:

Fraudulent news for profit: Stories written, financed, or disseminated by people who are motivated by financial incentives, particularly a desire to profit from online advertising services.72

Fraudulent news for political motives: Stories written, financed, or disseminated by private citizens individually or as part of movements or organizations, with the goal of supporting a political candidate, party, or ideology.

Government-sponsored misinformation: Stories written, financed, or disseminated by a state actor, or by groups formally or informally affiliated with a state actor.

The lines between these categories are fluid: Mercenary vendors of fraudulent news, for example, might also take fraudulent stories created by those with a political agenda and re-post them to their own websites. But these different disseminators of fraudulent news each have their own unique motivations for doing so.

A fourth category of fraudulent news, similar to but distinct from fraudulent news produced for political motives, is Conspiracy Theories—fraudulent news stories that appear to be genuinely believed by those who create the stories in the first place. Examples include such false stories as the canard about NASA's 1969 moon landing being faked, but may also have a politically tinged aspect, such as the suggestion that the terrorist attacks of 9/11 were orchestrated by the U.S. government.

For the purposes of this report, PEN America does not consider the following categories to constitute fraudu-

Satire: Commentary or criticism of society and politics

that employs sarcasm, humor, or deliberate exaggeration. While satirical news stories are sometimes mistaken for legitimate news, satire does not inherently constitute fraudulent news.

Mistakes: Stories that assert information, in good faith, that turns out to be incorrect or fraudulent. Today, such mistaken allegations can travel far further than their retractions. People posting on social media, whether they are amateur commentators or professional journalists, often make allegations without fact-checking, and these allegations can go viral. Similarly, journalists occasionally make mistakes that are later retracted or corrected through established processes at their media outlets, though often the mistaken reporting lives on. It is important to note that today such journalistic errors frequently take on outsize importance as they are used by those hostile to the mainstream media as evidence that it is the real "fake news."

Hyper-partisan news and commentary: News stories that are not entirely false but that slant or distort facts to an extreme degree. Such news stories are often motivated by support for a political party or ideology.

Clickbait or misleading headlines: Headlines that are written to provoke a strong reaction, prompting the viewer to click on or share a link. The click may lead to a fraudulent news story, hyperpartisan reporting, or a legitimate news article that is less provocative than the headline suggests.

Clickbait and sensationalist reporting are broader problems that affect trust in the press and complicate efforts to foster informed democratic debate based on factual information. This report's focus on fraudulent news should not be seen as a dismissal of those concerns. But here, clickbait or misleading headlines, like hyper-partisan reporting, fall into the category of fraudulent news only when they intentionally present demonstrably false information as true.

Perhaps the biggest grey area for fraudulent news is when a news story is presented in a way that is so misleading that it unerringly leads the reader to a false conclusion, even absent any false statement of fact. Hyper-partisan news and clickbait operate within this grey zone, where misleading can shade ever more darkly into fraudulent. When does misrepresenting the views of others constitute hardball politics or sensationalist reporting-distasteful, but on some level implicitly accepted as in-bounds in the world of politics or of tabloid journalism-and when does it become so fraudulent as to merit the moniker of fraudulent news?

Reasonable people can disagree on the answer to this question. For the purposes of this report, PEN America defines fraudulent news as stated above and focuses primarily on stories that fit that definition. Some examples of misleading news are presented when they are instructive.

RELEVANT DOMESTIC AND INTERNATIONAL LAW

Freedom of expression is protected both by the U.S. Constitution and under international law. Within the United States, the First Amendment provides:

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.

The First Amendment prohibits the federal and, through the Fourteenth Amendment, state governments from restricting Americans' free speech. The First Amendment similarly protects freedom of the press, which is defined expansively: The Supreme Court has defined "the press" as "every sort of publication which affords a vehicle of information and opinion."

Article 19 of the International Covenant on Civil and Political Rights (ICCPR), to which the United States is a state party, includes within its concept of freedom of expression the "freedom to seek, receive and impart information and ideas of all kinds." Within the American context, the right to receive information is also an "inherent corollary" of our First Amendment rights to both free speech and a free press. 75

International law, including Article 20 of the ICCPR ("Any advocacy of national, racial or religious hatred that constitutes incitement to discrimination, hostility or violence shall be prohibited by law")⁷⁶ is more permissive in terms of prohibiting hate speech than the U.S. Constitution, allowing restrictions on, for example, incitement to hatred and discrimination.⁷⁷ Under U.S. law, by contrast, the only form of incitement that can be restricted is incitement to imminent violence or lawless action. When it comes to free expression, the First Amendment is generally recognized as offering the greatest degree of protection of any country in the world against government interference with speech on the basis of its content.78 This is, in part, because of past American experiences with government interference with speech: From the 1798 Sedition Act that outlawed criticism of the federal government if "false," to the Red Scares of the early to mid-20th century, to Comstockian campaigns against "obscenity" and attacks by federal, state, and local governments on social reformers, including suffragettes, advocates for the poor, labor organizers, and, especially, civil rights leaders, U.S. history has led to a modern understanding of the First Amendment that permits reasonable restrictions on speech with respect to its time, place, and manner but is uniquely skeptical of the government's ability to fairly and consistently call winners and losers through content- or viewpoint-based restrictions.

The First Amendment is a cornerstone of American law, politics, and culture. In *Palko v. Connecticut*, a landmark 1937 Supreme Court decision, Justice Cardozo's majority opinion referred to free expression as "the matrix, the indispensable condition of nearly every other form of freedom." The court has repeatedly affirmed the First Amendment's protection of hateful and offensive speech, even by extremist groups such as the American Nazi Party and the Ku Klux Klan. In a 2011 case overturning a jury verdict against the Westboro Baptist Church for holding offensive, virulently anti-LGBTQ protests outside the funeral of a soldier killed in Iraq, the Court underscored the centrality of protecting unpopular views, even in their most noxious forms:

Speech is powerful. It can stir people to action, move them to tears of both joy and sorrow, and—as it did here—inflict great pain. On the facts before us, we cannot react to that pain by punishing the speaker. As a Nation we have chosen a different course—to protect even hurtful speech on public issues to ensure that we do not stifle public debate."⁸¹

The Supreme Court has carved out several narrowly defined exceptions to First Amendment protection, including fighting words, 82 true threats, 83 84 obscenity, 85 and defamation. 86 The Supreme Court has also permitted restrictions on speech judged likely to incite imminent violence. 87

In contrast, the Supreme Court has consistently interpreted the First Amendment as offering significant protection to those who utter statements that later turn out to be false. 88 The extent to which the shield of First Amendment protection extends to deliberate false speech is not fully settled. However, while the Supreme Court has repeatedly placed a low value on knowingly false statements of fact, 89 it has declined to endorse the argument that even knowingly false statements stand outside of First Amendment protection. 90

The right to speak falsely in the United States is, certainly, legally circumscribed in several ways. Several categories of false statements, most notably defamation, may constitute tortious behavior, for which a person who has been harmed may bring suit. Defamation, the communication of a false statement that harms the reputation of another, is a category under which much of fraudulent news—when involving claims regarding a specific person—may potentially qualify.



Private companies-including social media companies, online service providers, and others—are able to act on their own initiative to "censor" or otherwise restrict speech by those who use their services or platforms.

A finding of defamation against a public figure—a category that includes public officials as well as celebrities and, in some cases, those who have simply weighed in publicly on contemporary issues—requires that the defendant acted with "actual malice," in other words, knowledge that the statement was false or made with reckless disregard for the truth. Notably, the case that established the "actual malice" requirement-New York Times Co. v. Sullivan⁹¹is widely acknowledged as one of the landmark cases guaranteeing a robust free press in the United States.92 The "actual malice" standard insulates media outlets (or individuals) from facing possible bankruptcy as the result of mistakes that may inevitably occur in any long-standing enterprise, and helping to prevent powerful private parties from exercising a 'lawyer's veto' over unflattering editorial opinions. (The standard for the finding of such fault is normally lower for a non-public figure, requiring only negligence on the part of the publisher.)93

It should also be noted that the legal opportunity to bring, and prevail in, a defamation claim will in many cases actually have very limited utility against purveyors of fraudulent news. Fraudulent news publishers are often fly-by-night operations where the person responsible for false claims may be difficult to locate or effectively sue. As this report will examine, many such publishers may be located outside of the United States, raising a whole set of legal, jurisdictional, and practical obstacles to bringing a defamation suit. Additionally, the person suffering the harm is responsible for pressing a defamation claim, placing the burden on the victim of fraudulent reports. This burden may be particularly large when the victim is a public figure who may be subjected to a volume of fraudulent news.

Other categories of unlawful knowingly false statements—such as fraud, perjury, or impersonation of a public official—may be criminally punished.94 The Supreme Court has noted that "in virtually all of these instances" where knowingly false speech is criminalized, "limitations of context, requirements of proof of injury, and the like, narrow the statute to a subset of lies where specific harm is more likely to occur." 95 This focus on specific and tangible harm contrasts with general and diffuse harm to society.

Justice Kennedy of the Supreme Court, in his

examination of the problem of false speech, lays out the rationale for why false speech that creates a general harm is better addressed through societal solutions than through the power of the law: "The remedy for speech that is false is speech that is true. This is the ordinary course in a free society. The response to the unreasoned is the rational; to the uninformed, the enlightened; to the straight-out lie, the simple truth . . . Society has the right and civic duty to engage in open, dynamic, rational discourse. These ends are not well served when the government seeks to orchestrate public discussion through content-based mandates."96

The First Amendment serves to restrict government interference with our rights. Any government attempt to compel private technology companies to restrict or censor the speech hosted on their platforms would be subject to First Amendment scrutiny to determine its constitutionality. Any regulation to preclude "fake news," were it not to qualify as one of the categories of speech receiving diminished protection, would most likely be interpreted as an attempt to regulate speech based on its content, for which courts would apply "strict scrutiny." 97 Under such a test, the law must be justified by a "compelling government interest"; the law must be "narrowly tailored" to achieve such an interest; and the law must be the "least restrictive means" for achieving such interest. In practice, the attempted government regulation of speech based on its content is almost never accepted as constitutional.98

The First Amendment does not—in all but the most limited of circumstances-preclude private parties from restricting speech. Thus, private companies-including social media companies, online service providers, and others-are legally permitted to act on their own initiative to "censor" or otherwise restrict speech by those who use their services or platforms. For the Facebooks, Twitters, and Googles of the world, the organizations' commercial relationships with its users, as well as its Codes of Conduct for how it will self-regulate as an organization, constitute the framework for its ability or responsibility to impede speech.

Thus, when users argue that a company has "censored" them, they are using the term more generally than as a legal concept. However, just because these private restrictions are not legally prohibited, certainly does not mean they are free from danger from a free speech standpoint, as this report will further discuss.



NEWS CONSUMERS' BILL OF RIGHTS AND RESPONSIBILITIES

Rights With Respect to News Media Outlets

News consumers have a right to expect that professional journalists' first obligation will be to seek the truth;

News consumers have a right to expect that responsible media outlets will develop ethical guidelines for their journalists, will make these guidelines publicly available and take steps to foster and monitor adherence to the guidelines;

News consumers have a right to expect that news outlets will have transparent, easy-to-find procedures in place to quickly and prominently correct mistakes in reporting;

News consumers have a right to expect that reports will be properly sourced, and quotes will be verbatim or paraphrased with fealty to the original;

News consumers have a right to expect that sources will be identified to the maximum extent possible, and if not, news organizations will explain why not, such as national security or criminal justice reporting;

News consumers have the right to expect that when an outlet publishes a story, that story has been independently verified by the outlet unless otherwise stated, that the source of the story has been given proper attribution, and that nothing has been published based purely on rumor;

News consumers have a right to be notified of potential conflicts of interest, and a right to expect these journalists and media outlets avoid financial or personal conflicts;

News consumers have the right to expect that news reports, analyses, opinion, and editorial commentary-written or verbal—will be prominently and clearly labeled as such;

News consumers have the right to expect that photographs, video, and audio will not be doctored and will be verified for authenticity prior to publication;

News consumers have the right to expect that news divisions will enjoy editorial independence from their ownership's business interests, and that the ownership of news organizations will be fully, truthfully, and publicly disclosed;

News consumers have the right to expect that media outlets will include and accurately reflect diverse viewpoints in coverage, and that individuals or organizations who are criticized by the outlet will have an opportunity for comment or rebuttal:

News consumers must have the right to access easy-touse channels to raise concerns and complaints about coverage and to receive a reply. In cases of major or widespread complaints about coverage, answers should be made public;



Rights with Respect to Media Platforms, Including Social Media and Search Engines

News consumers have the right to expect that an online media platform will carry out due diligence and know their customers, clients, and business partners, and will ensure they do not do business with those seeking to exploit or manipulate consumers;

News consumers have the right to expect that media platforms will devote adequate resources to track, prevent, and remedy any misuse of their platforms by those who intend to deceive users through the spread of fraudulent news and information:

News consumers have the right to expect that media platforms will empower consumers with easy-to-use tools that they can use to gauge the credibility of information disseminated through the platform;

News consumers have the right to expect that platforms will disclose incidents of misuse and manipulation in ways that affect consumers, including direct notifications to consumers who were served deceptive content or advertising (consistent with privacy policies);

News consumers have the right to expect that platforms will clearly and publicly disclose policies governing when, why, and how the platform will take down content that violates its polices, such as threats, harassment, and unlawful or deceptive content;

News consumers have the right to accessible, easy-to-use, and quick channels to report misinformation published by or on a platform;

News consumers have the right to expect that media platforms that do take down content will have a clear and robust appeals process;

News consumers have the right to expect that known purveyors of content aimed to deceive consumers will not be able to profit through advertising or other revenue opportunities made available by media platforms.

Responsibilities

News consumers also bear responsibilities:

News consumers should avoid spreading false information, including reposting or sharing information without first reading it through, and by investigating the credibility, provenance, and accuracy of the information;

News consumers should support news outlets that embrace guidelines embodied in the Bill of Rights above, such as explicit corrections and ethics policies, rules on source attribution, and a policy to preserve the accuracy and integrity of primary source material, including quotations, photographs, or video;

News consumers should endeavor to consume news from a variety of viewpoints, and to engage with media that challenges their preconceptions or biases;

News consumers should report instances of misinformation to platforms and outlets that publish them to facilitate more effective efforts to avoid the promulgation of false information:

News consumers should understand that a key role of journalism is to challenge the powerful, and that a free press is an essential safeguard of American liberty.

PREFACE

his report aims to examine the problem of fraudulent news and the related erosion of trust in the media and facts, and proposed solutions for addressing it. The introductory essay to this report provided an overview of the nature and seriousness of the problem, an examination of its actual and potential consequences, and an overview of the breadth of strategies

This report aims to examine the problem of fraudulent news and the related erosion of trust in the media and facts, and proposed solutions for addressing it.

and tactics necessary to remedy it. The remaining sections focus on how fraudulent and distrusted news is distributed, the central actors that can play a role in curbing

its spread, and a range of approaches to manage this looming crisis.

We begin by looking at how the spread of fraudulent news has been facilitated by Facebook, Google, and Twitter and the ways each company is responding to the problem. We also discuss how traditional or "mainstream" journalism has in part contributed to the breakdown of public trust in the media and what newsrooms are doing to rebuild that trust and improve the accuracy and transparency of their reporting processes. Finally, we look at two civil-society-led initiatives: professional fact-checkers and news literacy education programs. In each of these subsections, we identify the most promising approaches underway and highlight areas that continue to pose challenges to the quality and integrity of the news environment. We also examine the implications of these approaches for freedom of expression, recognizing that in some areas difficult trade-offs exist between allowing the unhampered transmission of ideas and information, and preventing public discourse from being mired in falsehoods.

The report does not address in detail questions of how to identify or appropriately penalize the various producers of false news. There has been a significant amount of societal and journalistic attention paid to exploring the sources of fraudulent news: from mercenary false news vendors making an industry out of lying online, to hyper-partisans and trolls, to foreign agents of misinformation. The work of exposing those who traffic in false news is vital, and we call for resources to be devoted to exposing those who originate and propagate false news. But such exposés are not PEN America's area of expertise. We have focused instead on a series of enabling factors that permit false news to spread and thrive online: the deficit of trust in the media, the rapid pace of developments in technology and in social media in particular, and the public's susceptibility to seek out, and to believe, only information that reinforces individuals' existing worldview. This report focuses on approaches that may help address those larger questions, and that show promise in reducing the spread of, and harm done by, false news.

Finally, this report focuses on approaches that are compatible with strong protections for free speech, press freedom, and the free flow of information. The right to lie—online or off—is protected by the First Amendment to the U.S. Constitution. Placing the power to determine what constitutes a "reliable source" of information, who is a "real" journalist, or what news stories are too dangerous

to be allowed to be seen in the hands of government actors or employees of private corporations would undercut free expression online (and would almost certainly be unconstitutional). There are no easy answers here, but that does not mean that free speech advocates must throw up their hands. This report

There are no easy answers here, but that does not mean that free speech advocates must throw up their hands. This report identifies a number of ways to fight for the value of the truth, equip the public to resist deliberate efforts to spread confusion and misinformation, and reduce incentives for doing so.

identifies a number of ways to fight for the value of the truth, equip the public to resist deliberate efforts to spread confusion and misinformation, and reduce incentives for doing so.



An aerial view of the Menlo Park offices of Facebook

FACEBOOK

When Mark Zuckerberg started Facebook with a few friends at Harvard in 2004, "Thefacebook," its original name, had a simple model.⁹⁹ Friends could post messages on a user's "Wall."100 It began as an "online directory that connects people through social networks at colleges"101 and has evolved into the world's largest social network, with over two billion monthly users worldwide as of June 2017.102

As Facebook's reach and influence have grown to span the globe, so has its role as a news source.103 Features designed to share news stories, not just personal information, have been added gradually. In 2006, Facebook introduced the News Feed, which instead of news articles features a personalized selection of updates about your friends' activities, which the social network dubbed "news stories,"104 and enabled its users to share news, blogs, photos, and videos from anywhere on the internet.105 In late 2013, the company announced it would add "quality articles" to personalized News Feeds because of the amount of interest—and traffic—news articles generate.106 The News Feed uses a sophisticated algorithm to sort through the thousands of pieces of content circulating on the platform to determine what you are most likely to be interested in seeing, based on factors like your relationships, your past activity on Facebook, and the popularity of an item with other users, and then prioritizes them in order of assumed importance.107

In 2014 Facebook introduced a separate "Trending" feature to "help people discover timely and relevant conversations about the news that they care about."108 In 2016, Facebook made the Trending feature more algorithmic, 109 and in January 2017 updated the feature to show publisher headlines on the selected articles. 110 In May, Facebook said it would expand the Trending feature to include related stories by diverse publications and commentary by public figures and friends." In October, the company announced it is testing a feature developed with publishers as part of the Facebook Journalism Project, aimed at giving users additional context on articles shared in their News Feed. "This new feature is designed to provide people some of the tools they need to make an informed decision about which stories to read, share, and trust," Facebook said in the announcement.112

In September 2017, the Pew Research Center reported that 45 percent of American adults get at least some of their news from Facebook. This is a far larger percentage of the U.S. population than gets news through Twitter (11 percent), YouTube (18 percent), or Instagram (7 percent).113

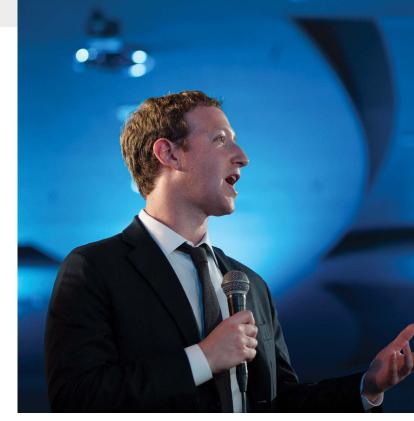
Experts believe that Facebook, more than any other social media platform, has facilitated the spread of fraudulent news because of its vast number of users and the many mechanisms that it offers for sharing information quickly.¹¹⁴ "Facebook has a role in human communication like nothing in history," Craig Silverman, BuzzFeed News's media editor, told PEN America.¹¹⁵ "There's nothing like it in the world. It operates on a scale completely unheard of in human history. It's so big, they don't always know what's happening on their site. That's why they were taken off guard by 'fake' news during the election."¹¹⁶ Karen Wickre, who held a senior communications position at Google for nine years and one with Twitter for five years, noted, "With Facebook's vast reach, it's been relatively easy to gin up and share content so it becomes a thing people believe because they saw it on their Facebook page."¹¹⁷

Is Facebook Responsible for the U.S. Election Result?

Following the 2016 presidential election, Facebook came under fire for what some saw as its outsize influence over the election's outcome. Critics claimed that the platform's News Feed algorithms played a key role in distributing fraudulent news while also stoking the political polarization of the left and right. In May, failed Democratic presidential candidate Hillary Clinton went so far as to place some of the blame for her loss on social media in general and Facebook in particular, stating that "the vast majority of the news items posted [on Facebook] were fake." 120

Initially, Zuckerberg dismissed the suggestion that Facebook had any impact on the election as "a pretty crazy idea."121 Less than 1 percent of the millions of posts on Facebook each day were fake, he stated.¹²² But the marketing analytics firm Jumpshot disputed Zuckerberg's assessment, collecting data from over 20 fraudulent, hyper-partisan, and reputable news sites between September 1 and November 15, 2016.123 Overall, Jumpshot found that Facebook referrals accounted for 2.5 times more total traffic directed to fake news than real news sites during election season.¹²⁴ In one example, Jumpshot found that the hyper-partisan, right-leaning website American News-which earned widespread infamy after publishing a fraudulent headline citing Denzel Washington's endorsement of Donald Trump¹²⁵—received a whopping 78 percent of its traffic from Facebook, compared with the 20 percent and 11 percent of traffic that the The New York Times and CNN respectively received from Facebook during the same time period.126

Craig Silverman made a concurrent discovery in a November 2016 BuzzFeed News analysis, which found that in the last three months of the presidential campaign, Facebook's top-performing fraudulent news stories about the election gained significantly more traction than the top-performing stories from news outlets like NBC News, The Washington Post, and The New York Times. While the news media's 20 most popular election stories received just under 7.4 million shares, reactions, and comments



Facebook co-founder Mark Zuckerberg poses a question during the CEO Summit

on Facebook between August 1 and Election Day, the 20 top-performing fake and false election stories generated more than 8.7 million Facebook engagements.¹²⁸ Put simply, in the last three months of the 2016 campaign season, Facebook users were more likely to share and engage with fraudulent news articles than real ones.

Hillary Clinton's claim that the "vast majority" of news shared across Facebook was fake¹²⁹ was an overstatement. But according to a recent Stanford University study, "Social Media and Fake News in the 2016 Election," much more of the false news shared during the campaign was anti-Clinton than anti-Trump.¹³⁰ Drawing on a 1,200-person post-election survey and a database of 156 false election-related news stories (pulled exclusively from leading fact-checking sites), researchers found that that "fake news was both widely shared and heavily tilted in favor of Donald Trump."¹³¹ Among the 156 fraudulent news items contained in the database, articles were three times more likely to be pro-Trump than pro-Clinton.¹³²

It's important to note that the Stanford researchers remain skeptical of how much direct impact Facebook shares might have had on the election overall. "For fake news to have changed the outcome of the election," they said, according to Poynter, "a single fake article would need to have had the same persuasive effect as 36 television campaign ads." But the researchers were also quick to add that, given the startling and memorable nature of fraudulent news headlines, they also could be more persuasive than television ads; more research remains to be done. "54"

Whether or not it had a major impact on the election,



Facebook still has an unprecedented problem on its hands. Its executives are facing pressure from shareholders, policy makers, and the public, with critics asserting that as a \$500 billion for-profit corporation135 employing some of the smartest people in the world, Facebook isn't doing enough to tackle fraudulent news on its platform.¹³⁶

"For one company to dominate the conversation globally is a disaster," Dan Gillmor, who teaches media literacy at Arizona State University's Walter Cronkite School of Journalism and Mass Communication, said. 137 "It's bad for their business (in the long run) and bad for free speech. The platforms need to put some serious resources into helping their users become critical thinkers and make better decisions and become much more news literate."138

By December 2016, Zuckerberg had come around. "While we don't write the news stories you read and share, we also recognize we're more than just a distributor of news," he wrote in a Facebook status update. 139 "We're a new kind of platform for public discourse—and that means we have a new kind of responsibility to enable people to have the most meaningful conversations, and to build a space where people can be informed."140 Since then, Facebook has debuted a series of new test features, or tweaks to existing features, aimed to curb the spread of fraudulent news.141 It has experimented with human review, revised algorithms, and new partnerships to reduce false news, deter consumers from sharing it, and better educate users, while, it says, remaining aware of slipping into the precarious world of censorship.142

There are early indications that as an awareness of the prevalence and harms of fraudulent news has spread, Facebook users have become more savvy. According to a March survey by BuzzFeed News and Ipsos Public Affairs, 54 percent of American adults trust news on Facebook "only a little" or "not at all," and 42 percent of them said that's because "Facebook doesn't do a good job of removing fake news."143 A March poll of young Americans between the ages of 18 and 29 conducted by Harvard University found that, on average, they believe that 49 percent of news in their Facebook feed is fake.144 In the early fall of 2017, explosive revelations that the Russian government had utilized Facebook to influence the U.S. political debate before the 2016 election drew new attention to Facebook's power to shape news consumption and gave rise to new fears about the potential for the platform to foster distortions in public discourse.145

Facebook has been moving cautiously, as it walks a fine line between upholding users' rights to free expression-including the right to say things that aren't true-and its obligation to remove unlawful content and its aim to provide a credible platform that does not manipulate or mislead. The company claims that it is trying to find a path between getting rid of false information and preserving freedom of speech.146 As detailed in an April 2017 post from Facebook VP Adam Mosseri, the company is focusing on three strategies: disrupting economic incentives for posting false news, building new products to identify and limit the spread of false news, and helping its users make more informed decisions about what to read, trust, and share.147

"We know people want to see accurate information on Facebook-and so do we," Mosseri said.148 "False news and hoaxes are harmful to our community, it makes the world less informed, and it erodes trust."149

But later that month, Sheryl Sandberg, Facebook's chief operating officer, echoed Zuckerberg's initial assertions that the platform is a tech company, not a media company.150 "I don't think we have to be the publisher, and we definitely don't want to be the arbiter of the truth," Sandberg told the BBC.151 "We don't think that's appropriate for us. We think everyone needs to do their part. Newsrooms have to do their part, media companies, classrooms, and technology companies."152

Cutting Off Ad Revenue to Purveyors of Fraudulent News

Facebook's lifeblood is third-party advertising—in 2016, advertising accounted for 97 percent of the company's revenue.153 Like Google, Facebook recognizes that creators of fraudulent news are often motivated by money, and that its platform is enabling their ability to profit.154 Facebook's Mosseri said in his April post, "These spammers make money by masquerading as legitimate news publishers and posting hoaxes that get people to visit their sites, which are often mostly ads."155 Facebook says that it has taken a number of steps to identify fraudulent-news distributors and cut off their revenue flow, including marshaling Facebook users and independent fact-checkers to identify fraudulent news items, stepping up efforts to detect fake or spam accounts, making it harder for fakenews creators to buy ads on Facebook, and blocking ads on Facebook Pages that "repeatedly share stories that have been marked as false by third-party fact-checkers."156 (Facebook Pages are public profiles for businesses, public figures, organizations, and other entities and are visible to everyone on the internet. When you become a "fan" or "like" the page, you receive its updates in your News Feed and can interact with it.)157

Removing financial incentives for creating fraudulent news is an important part of curbing its spread, but technology and social media platforms must take a narrowly tailored approach that maximizes the public's right to access information and protects robust political discourse online. Platforms should strictly limit their efforts to cutting off ad revenue to the purveyors of demonstrably false information that is being presented as fact in an effort to deceive the public. They must work to ensure that their actions do not result in "false positive" identifications of websites whose content may be considered hyper-partisan or hyperbolic but is not demonstrably false or intended to deceive. Their advertising policies should make their requirements clear, and they should establish an appeals mechanism for websites that feel they have unfairly been classified as a purveyor of fraudulent news, which would trigger a review process of the initial determination by the platform. Most small websites, including those for political commentary and special-interest news reporting, depend on ad revenue to stay afloat, 158 and being erroneously identified as a fraudulent-news purveyor may result in the shutdown of the website's operations for lack of funds, which in turn limits the sources of information available to news consumers online.

Improving News Sharing on the Platform

Efforts to ensure that fraudulent-news creators can't profit from Facebook are laudable but will go only so far. They will not fix the challenge posed by those who make fake news for reasons other than profit (for example, for ideological reasons or in order to support one political candidate or damage another), and they won't address clickbait headlines that may mislead a reader at first blush but, when clicked, lead to an article that contains some factual information.

Facebook is also experimenting with modifications to its News Feed feature to de-emphasize clickbait headlines and misinformation, and surface more reliable sources of information.¹⁵⁹ Company managers say that they are testing ways to make it easier for users to flag and report a news story that they think is false.160 In December 2016, Zuckerberg explained: "We've also found that if people who read an article are significantly less likely to share it than people who just read the headline, that may be a sign it's misleading. We're going to start incorporating this signal into News Feed ranking."161 In May 2017, Facebook announced that it would use artificial intelligence to find ad-laden fake websites and sponsored spam content to push them down in News Feed rankings.¹⁶² "We hear from our community that they're disappointed when they click on a link that leads to a web page containing little substantive content and that is covered in disruptive, shocking or malicious ads," the post began. 163 It then explained:

We reviewed hundreds of thousands of web pages linked to from Facebook to identify those that contain little substantive content and have a large number of disruptive, shocking or malicious ads. We then used artificial intelligence to understand whether new web pages shared on Facebook have similar characteristics. So if we determine a post might link to these types of low-quality web pages, it may show up lower in people's feeds and may not be eligible to be an ad. This way people can see fewer misleading posts and more informative posts.¹⁶⁴

Facebook is also working to "deprioritize" links in the

Disputed by Multiple, Independent Fact-Checkers

Before you share this content, you might want to know that the fact-checking sites, Associated Press and Snopes.com disputed its accuracy.

Cancel

Continue

Facebook's "Disputed" Badge

News Feed posted by individual users who share many posts a day, as it announced in June 2017. Mosseri explained that Facebook's research indicates that people who post more than 50 times a day are often sharing what Facebook calls "low-quality content such as clickbait, sensationalism, and misinformation." He said that the correlation between these "super-posters" and low-quality content is so high that it is "one of the strongest signals we've ever found for identifying a broad range of problematic content." Facebook will identify the links that the "super-posters" are sharing and reduce their distribution. 168

"Overall I think their News Feed algorithm tweaks have probably had an effect in reducing the spread of completely false news, though this kind of content is still being created and spread on the platform," BuzzFeed's Silverman said. 169 "I think their investment in this area has also begun to act as a bit of a deterrent to people who might be tempted to create and spread false information for profit. But of course, this problem will never be solved, and the people who are invested in making money from false and misleading information are very motivated and creative." "70

Despite Facebook's efforts, the platform is still in many ways poorly equipped for sharing information about breaking news developments. After the horrific mass shooting in Las Vegas in October 2017, Facebook's Trending section pointed users toward a number of false reports, while its Safety Check page promoted stories that "falsely identified the suspected shooter and included misleading speculation on his motivation," as noted by Forbes.⁷⁷ Facebook eventually spotted and removed the false information and said that it is "working to fix the issue that allowed this to happen."

The Power of Algorithms-and the Case for Caution

Adjusting algorithms to de-emphasize or suppress "low quality" content should be approached carefully and with as much transparency as possible. Many users of platforms that rely on algorithms to surface information, including Facebook and Google, do not fully understand how those



algorithms work.¹⁷³ There is also a broad misperception that algorithms are "neutral," or less biased than humans, in the way they operate.¹⁷⁴ Sociologist and technologist Zeynep Tufekci explained why this perception is wrong in a 2016 New York Times op-ed:

"[Algorithms] 'optimize' output to parameters the company chooses, crucially, under conditions also shaped by the company. On Facebook the goal is to maximize the amount of engagement you have with the site and keep the site ad-friendly. You can easily click on "like," for example, but there is not yet a "this was a challenging but important story" button. This setup, rather than the hidden personal beliefs of programmers, is where the thorny biases creep into algorithms.... The newsfeed algorithm also values comments and sharing. All this suits content designed to generate either a sense of oversize delight or righteous outrage and go viral, hoaxes and conspiracies as well as baby pictures, happy announcements (that can be liked) and important news and discussions. Facebook's own research shows that the choices its algorithm makes can influence people's mood and even affect elections by shaping turnout."175

Algorithms are adjusted by humans, and the decisions that they make regarding what websites or items of information to promote or de-emphasize affect what billions of people around the world see every day, impacting what information they do-and do not-have access to in forming their personal opinions, conducting research, and participating in civic debates. Moreover, Facebook's efforts to moderate content-whether by human reviewers or by algorithm-have, at best, a mixed track record. A Pro-Publica report based on leaked internal documents from the company showed how Facebook's guidelines for identifying and removing hate speech led employees to delete the statement "All white people are racist. Start from this reference point, or you've already failed," made by poet and Black Lives Matter activist Didi Delgado-whose account was also suspended for seven days. ProPublica also showed how those same guidelines led it not to remove a post from Representative Clay Higgins (R-LA) in which he referred to "radicalized Muslims" and said, "Hunt them, identify them, and kill them."176 More recently, Facebook's censorship of posts about the treatment of Myanmar's Rohingya people, citing violations of its community standards, has raised widespread alarm.¹⁷⁷ Some non-governmental organizations suspect that there is a "targeted campaign in Burma to report Rohingya accounts to Facebook and get them shut down"—and, according to reporting by The Daily Beast, it is working.¹⁷⁸ These examples suggest that urging Facebook to implement sweeping measures to detect and suppress false information may lead to the erroneous suppression of a broad array of sources—suppression that will be difficult to see or prove in real time.

The potential for any type of content moderation, whether by human reviewers, algorithms, or some combination, to dramatically alter the range of information accessible to internet users underscores the need for technology platforms to clearly and publicly explain their efforts to thwart the spread of fraudulent news, and to publish their policies in language that users can easily understand, including precise definitions of what constitutes fraudulent news. Clear explanations of what is being targeted in these efforts, and why, will also aid the platforms in avoiding slippery-slope scenarios when public pressure is exerted on them to de-emphasize information that may be controversial but is not demonstrably false.

Facebook is also making adjustments to the News Feed to try to address the "filter bubble" problem that has been observed on many social media platforms.¹⁷⁹ Its algorithms are typically designed to look at a user's past clicks, likes, and shares to point her toward other content she may like.180 Particularly for news and opinion pieces, this can result in a user's News Feed surfacing news and commentary that tends to reinforce preexisting views rather than offering other perspectives from different points on the political spectrum.¹⁸¹ In August 2017, Facebook rolled out a change to its Related Articles" feature. 182 Since 2013, it has offered users related articles tied to the topics of posts they viewed.¹⁸³ The 2017 change means that the related articles will appear adjacent to a story before users clicks on the link-so that before reading a piece, they can see, for example, if fact-checkers have weighed in on it or if other outlets are reporting on the same topic and what they are saying.¹⁸⁴ This feature is aimed both to signal if a piece of content may be fraudulent news and to offer different perspectives on the subject.185 Reporting on this new feature, Tech Crunch noted, "While objectively fake news gets the majority of the attention, it's exaggeration and warped opinion that are much more prevalent and therefore potentially polarizing. If extreme right and left publishers' articles get paired with centrist Related Articles, it could dissuade people from blindly swallowing the rants and raves that tear society apart."186

In July, Facebook announced another modification to try to stop the spread of misinformation: removing the ability to edit link headlines, images, and descriptions of articles posted on Facebook.¹⁸⁷ Before this change, it was generally easy to customize these elements of articles posted on Facebook.¹⁸⁸ The new feature works against false news purveyors, who have been known to co-opt stories by rewriting the headlines to make them more sensational in hopes of sending them viral and thereby getting more clicks.¹⁸⁹ Facebook has made exceptions to the no-editing rule for original publishers, recognizing that they often want to reframe headlines and article descriptions to target particular audiences. In its Page Publishing Tools, it has introduced a link that allows original publishers to indicate their link ownership and to continue editing the way their own links appear on Facebook.¹⁹⁰

In another effort to support genuine publishers, many of whom rely heavily on Facebook as a source of web traffic, in August Facebook started adding publishers' logos alongside articles that appear in the Trending and Search sections.¹⁹¹ This change helps readers understand who produced the news article they are reading, both providing an accessible, visual identifier to help users understand whether they are reading something produced by an established media outlet and allowing that outlet to reinforce its brand.¹⁹²

Improving Fact-Checking Through Partnerships

In December 2016, to stem the flow of false news, ¹⁹³ Facebook announced a partnership with a series of fact-checking organizations that are signatories to the International Fact Checking Network. ¹⁹⁴ The coalition includes Snopes, FactCheck.org, PolitiFact, and AP Fact Check. ¹⁹⁵ In March 2017, Facebook introduced a tool that allows users to report hoaxes or suspicious content. ¹⁹⁶ If they see a blatant falsehood, they can click on the menu in the upper-right corner and choose Report, then "I think it should not be on Facebook," then select "It's a false news story." ¹⁹⁷

At that point, the story is referred to coalition members to fact-check suspicious content. "Once it's flagged, it shows up in our dashboard," Lori Robertson, managing editor of FactCheck.org told PEN America. "There's also a popularity bar that shows how often it's been flagged. If it's filled all the way in, that gives us an indication of how widespread it is. The popularity bar shows which items have more shares and comments." In an effort to avoid charges that Facebook is engaging in politically motivated censorship, the fact-checkers have an intentionally narrow focus: They will only fact-check articles that intentionally deceive, pretend to be from a legitimate news site, or contain obviously false material. They do not weigh in on the veracity of opinion pieces or pieces that are misleading but not factually incorrect.200

FactCheck.org director Eugene Kiely explained: "We look at the dashboard list of Facebook stories every weekday to see what's new and to add links for fake stories that we have already debunked and that are recirculating. Facebook adds new stories every day, and old stories cycle off the list after seven days, so we have seven days to publish from the time a story is flagged. It takes a day or two to publish, depending how complicated it is." ²⁰¹

Facebook will add a "disputed" badge only if two or more approved fact-checking organizations agree that it is false.²⁰² A post with this badge will automatically lose prominence in users' News Feeds.²⁰³ If users take steps to share content marked as disputed, a "disputed" warning will pop up and ask if they still want to share it.²⁰⁴ If they click "continue," the post will be shared with the warning

attached.²⁰⁵ Once a story is flagged as disputed, the post can't be made into an ad or promoted.²⁰⁶

"You will still be able to read and share the story, but you'll now have more information about whether fact checkers believe it's accurate," said Zuckerberg.²⁰⁷

In June, Facebook began paying its fact-checking partners, Kiely of FactCheck.org told PEN America.²⁰⁸ The amount of work that the fact checkers do for Facebook varies. Four fact-checking organizations that partnered with Facebook told USA Today that they debunk one or two fake stories a day, at most.²⁰⁹ Kiely said, "We are probably averaging about three stories a week since June, which is when we started receiving funding from Facebook." FactCheck.org is in the process of hiring a permanent person for this project, "so we should be even more productive in future months."²¹⁰

Aaron Sharockman, PolitiFact's executive director, told *USA Today* that he sees about 200 flagged stories a day.²¹¹ Only "a small amount of those stories are patently false," he said.²¹² "The rest are completely true and reported by trolls or misleading—but not necessarily false—hyperpartisan clickbait."²¹³ *USA Today* reported that PolitiFact checks one or two fake stories a day for Facebook, the Associate Press checks a handful or more a week, and ABC News has debunked two dozen fake news stories since January.²¹⁴

Critics question the adequacy of Facebook's fact-checking effort. Hany Farid, chair of the computer science department at Dartmouth College, told PEN America: "I think that false news is just one of many abuses that is happening online, and most companies are turning a blind eye or making only symbolic gestures to deal with the PR issues and loss of advertising." He continued: "Specifically, with respect to false news, I found Facebook's response lacking. They first denied the problem, they then admitted to the problem but instead of harnessing their substantial resources, they outsourced the work to sites like Snopes and PolitiFact and in the end still feed blatantly false articles to users' News Feeds. I'm wholly unconvinced that a 'disputed' tag has any impact." ²¹⁷

The fact-checking initiative does have several limitations. A credible, thorough fact check takes time. "Our process typically requires four people to be involved in all of our stories: a reporter to research and write it, an assignment editor who line edits it, a person to fact check it, and a copy editor," Kiely of FactCheck.org said.²¹⁸ "So it is labor intensive."²¹⁹ And while fact-checkers are meticulously investigating a story, the falsehood may still be making the rounds among Facebook's billions of users.

Even after a fact-check has been completed, a disputed article may simply become a badge of honor for purveyors of fake or hyper-partisan articles aimed at a specific political audience. For example, in March, Newport Buzz posted false information when one of its articles erroneously claimed that tens of thousands of Irish people were brought to the United States as slaves.²²⁰ The article was



Even after a fact-check has been completed, a disputed article may simply become a badge of honor for purveyors of fake or hyper-partisan articles aimed at a specific political audience.

subsequently fact-checked and determined to be false.²²¹ While many Irish people were indentured servants in the United States in the 18th and 19th centuries, there are numerous and significant differences between indentured servitude and slavery, among them that indentured servants had legal rights and were not treated as property, as enslaved people were.²²²

Facebook labeled the Newport Buzz post false—and then traffic to the Buzz's site skyrocketed.²²³ "A bunch of conservative groups grabbed this and said, 'Hey, they are trying to silence this blog-share, share, share," editor Christian Winthrop told The Guardian in May. 224 "With Facebook trying to throttle it and say, 'Don't share it,' it actually had the opposite effect."225 This happened even though Newport Buzz's "about us" section says: "PS-If we ever do anything that resembles "real" journalism, it was purely by mistake,"226 and the website's disclaimer says it "does not make any warranties about the completeness, reliability of accuracy" of information, though it is published in "good faith." 227

Facebook's partnership with independent fact-checking organizations has also drawn criticism from some conservatives. The Wall Street Journal's editorial board dismissed Facebook's fact-checking effort, suggesting that it would be tainted by partisan bias.²²⁸ "Behind this is the conceit that political debates could be settled if ideologues (Republicans) would only accept what the liberal consensus defines as 'facts,' as if worldview or interpretation are irrelevant," said the December 2016 editorial. "Facebook has long insisted that it is neutral about content, and earlier this year it denied reports that the platform censored conservative news. That's looking less credible."229 Many conservatives are skeptical of fact-checking initiatives, arguing that they focus more on false claims from the right than from the left, and that their analysis of false claims is more lenient toward liberals than conservatives. Perhaps in recognition of this issue, Facebook is reportedly working with the conservative Weekly Standard to make it a fact-checking partner.²³⁰ (This skepticism is discussed in more detail in this report's section on fact-checking initiatives.)

The Journal editorial went on to offer its own proposal:

If Facebook is really worried about bad information crowding out good, here's one suggestion. Pay news organizations in exchange for featuring trusted and reliable content where users can find it easily. Facebook's business model depends in part on making money off content produced by others, including this newspaper. But producing real news with credible standards of accuracy is expensive. How about paying publishers for it?231

Supporting Journalism and News Literacy Efforts

Facebook is also ramping up efforts to support journalism and news literacy efforts. In January 2017, the platform started its Journalism Project with a three-pronged approach: working more closely with newsrooms in creating Facebook products, doing more training, and creating new news gathering and reporting resources for journalists.²³² In April, in a three-day effort to educate its audience to be more news literate, it pinned a box to the top of every user's News Feed in 14 countries, offering 10 tips on how to spot false news.²³³ Facebook is also a funder of the News Integrity Initiative, 234 whose mission is "to advance news literacy, to increase trust in journalism around the world, and to better inform the public conversation," through applied research, projects, and meetings of industry experts.²³⁵

Facebook's Lack of Transparency Hinders Efforts to Measure the Effectiveness and Fairness of its Approaches

Facebook is clearly making an effort to respond to widespread concern about fraudulent news on its platform, while steadfastly maintaining that "we cannot become arbiters of truth ourselves—it's not feasible given our scale, and it's not our role."236 But critics and partners alike say that Facebook is unwilling to share data or information²³⁷ about how well any of these approaches are working,238 or to provide much transparency about how it detects and determines whether a particular piece of content is "low-quality." 239 Those criticizing Facebook's lack of transparency have reason to do so, in light of allegations by the tech news site Gizmodo in May 2016 that the editors who wrote descriptions for Facebook's Trending items suppressed conservative-leaning content.240 Facebook denied the claims,²⁴¹ but Quartz reported that by that August, Facebook had laid off the entire editorial staff of the Trending team and replaced them with engineers responsible for adjusting the relevant algorithm to ensure that it surfaced newsworthy articles.²⁴² Facebook also stopped writing its own descriptions of the items in this feed.²⁴³ However, as Quartz noted, "removing human writers from Trending doesn't necessarily eliminate bias. Human bias can be embedded into algorithms, and extremely difficult to strip out."²⁴⁴

Facebook has recently announced two moves to address criticisms of its lack of transparency. In June, the tech behemoth started publishing blog posts that provide background on the "hard questions" that its employees wrestle with. 245 Among the questions it intends to address is: "Who gets to define what's false news—and what's simply controversial political speech?" 246 To date, it has not yet published its take on this question, though it has addressed several of its hard questions, on how the platform acts to counter terrorism, how it addresses hate speech in a global community, and what should happen to users' online identity after they die. 247 The company also addressed its decision to share Russian ads with Congress in this section. 248

In August, Facebook hired *The New York Times*'s former public editor Liz Spayd as a consultant to help it be more transparent, share more of its decision-making process, and expand its "Hard Questions" blog series.²⁴⁹ Commenting on the move, the tech news site *Recode* said, "Spayd's role will be as an outsider who is inside, one who pushes boundaries at Facebook. Presumably, we'll see how hard she is allowed to do that in the months to come. It is clear that Facebook is also doing this to be more thoughtful about its major impact on society, but also because it looks good to do so."²⁵⁰

While these initiatives are certainly steps in the right direction, they are unlikely to address one of the chief critiques aimed at Facebook: that despite its claims that its efforts to crack down on fraudulent news are working, it will not share data with external researchers on how effective they are. In April 2017, Facebook's Adam Mosseri told the International Journalism Festival that there has been a "decrease" in false news on its platform and that Facebook knows "it's bad for people, it's at odds with our mission, and it's bad for our business. Eroding trust in Facebook over the long run is going to be really bad for us as an advertising business." 251 Sara Su, a product manager for the News Feed, told Politico in September that the fact-checking initiative was working but wouldn't provide numbers. "We have seen data that, when a story is flagged by a third party fact-checker, it reduces the likelihood that somebody will share that story," Su said.252

Facebook's own fact-checking partners have also called on the platform to share more information.²⁵³ More data would help them answer questions like: "how stories are affected by being flagged—whether reactions to them change, if sharing goes up or down, or, more broadly, if fact-checks are capable of changing the mind of someone inclined to believe a false story in the first place," Politico wrote, quoting Alexios Mantzarlis, director of the International Fact-Checking Network at the Poynter Institute.²⁵⁴

"At this point we know little about the fact-checking tools"

effectiveness," Mantzarlis told PEN America.²⁵⁵ "There's no data because Facebook hasn't shared the data. I have asked them." At the International Journalism Festival, Mantzarlis added, "Adam Mosseri of Facebook claimed false news overall was declining. He then said they can't measure it well. So I wonder how he can say it's declining."256 In a separate interview with Politico, Mantzarlis said that he would like to see "data on how the length of time it takes to flag a false story affects its spread. It's not hard to imagine other questions: Do certain types of stories require more immediate attention than others? Are there other types that may not be viral yet, but data has shown likely will be soon? When an article is flagged, how often do copycat versions with altered headlines pop up to replace it? Even knowing what types of headlines work best for fact-checking posts would be valuable."257

Mosseri's assertion that the fact-checking project is working was challenged by a Yale University study published in September 2017, which found that flagging fake news stories as "disputed by third-party fact-checkers" leads to only a modest increase in people's likelihood to judge the story as false, and can even create an unwanted halo effect:²⁵⁸

The researchers also found that, for some groups—particularly, Trump supporters and adults under 26—flagging bogus stories could actually end up increasing the likelihood that users will believe fake news.... The existence of flags on some—but not all—false stories made Trump supporters and young people more likely to believe any story that was not flagged, according to the study.²⁵⁹

While Yale's researchers conducted the study without data from Facebook, they agreed that Facebook needs to share more of its own data, echoing calls from researchers at numerous institutions.260 Responding to the Yale study, Mantzarlis noted to Politico that without more research, it is too early to say whether Facebook's fact-checking efforts are helpful or not, adding, "I'm hoping Facebook will see this study and determine that it is even more appropriate for them to share data as to how this is actually going."261 Facebook however, challenged the study's methodology, stating, "This is an opt-in study of people being paid to respond to survey questions; it is not real data from people using Facebook." 262 The latter is precisely the data that researchers would like to be able to use, if Facebook would allow them to-and such data might help to show that these efforts are in fact working.

Facebook's Russia Problem

Pressure on Facebook to disclose more information about the abuse of its platform to spread fraudulent news and misinformation has ramped up dramatically as investigations in 2017 into Russia's efforts to interfere in the 2016 presidential election have progressed.²⁶³



While these initiatives are certainly steps in the right direction, they are unlikely to address one of the chief critiques aimed at Facebook: that despite its claims that its efforts to crack down on fraudulent news are working, it will not share data with external researchers on how effective they are.

Some of this investigative attention has focused on the work of a St. Petersburg-based professional "troll farm," most commonly referred to as the Internet Research Agency (IRA) but also known by several other names, including the Federal News Agency.²⁶⁴ The IRA received mainstream attention in 2015 after Adrian Chen, then a writer for The New York Times Magazine, published a detailed account of its operations, which involve coordinated efforts by hundreds of employees to create content for "every popular social network," including Facebook, Twitter, and Instagram, as well as the comment sections of news outlets.²⁶⁵ These efforts constitute a form of pro-Kremlin information warfare, a "highly coordinated disinformation campaign" using fake social media accounts to spread hoaxes "designed to piggyback on real public anxiety."266 Chen noted, "By working every day to spread Kremlin propaganda, the paid trolls have made it impossible for the normal Internet user to separate truth from fiction."267 Several Russian media outlets, as well as the U.S. Office of the Director of National Intelligence, have concluded that the IRA is most likely funded by a close ally of Russia's president, Vladimir Putin.268

Investigators are working to uncover more details about what the IRA has done to try to influence the U.S. election and how extensive its operations on social media platforms, including Facebook, have been. In September, Facebook announced that it was sharing the content of over 3,000 ads linked to the IRA and other Russia-affiliated actors with Congress and Special Counsel Robert Mueller.²⁶⁹ The ads, which ran in the United States between 2015 and 2017, addressed controversial social and political issues.

Facebook has been slow to fully acknowledge possible efforts to manipulate its platform. In an April report, the company said that "malicious actors" used Facebook to push out propaganda and influence the political debate during the 2016 presidential election.²⁷⁰ It said that these malicious actors sought "to share information stolen from other sources, such as email accounts, with the intent of harming the reputation of specific political targets," and spelled out their process for doing so:

- Private and/or proprietary information was accessed and stolen from systems and services (outside of Facebook):
- Dedicated sites hosting this data were registered;
- Fake personas were created on Facebook and elsewhere to point to and amplify awareness of this data:
- Social media accounts and pages were created to amplify news accounts of and direct people to the stolen data.
- From there, organic proliferation of the messaging and data through authentic peer groups and networks was inevitable.271

It went on to note that "a separate set of malicious actors engaged in false amplification using inauthentic Facebook accounts to push narratives and themes that reinforced or expanded on some of the topics exposed from stolen data."272

The report earned Facebook credit from some quarters for publicly acknowledging the problem. Claire Wardle, the director of First Draft, told PEN America: "At least now, they've publicly recognized the scale of the problem. I believe they have large teams of engineers desperately trying to think about this problem. This is going to take them longer to solve." She compared these actions favorably with their inadequate previous efforts: Before, she said, "they needed some PR wins, so they've come out with initiatives that haven't really moved the needle."273

But the latest initiative also drew criticism: Although the report's introduction states that Facebook released it "to be transparent about our approach," the report itself falls short on transparency.274 It offers no explanation of how it arrived at its findings regarding the use of Facebook by these "malicious actors," and no data or evidence regarding how widespread the problem is, other than a brief note that "the reach of known operations during the US election of 2016 was statistically very small compared to overall engagement on political issues."²⁷⁵

Facebook has come under renewed scrutiny since disclosing in September 2017 that an internal review had "found approximately \$100,000 in ad spending from June of 2015 to May of 2017—associated with roughly 3,000 ads—that was connected to about 470 inauthentic accounts and Pages in violation of our policies. Our analysis suggests these accounts and Pages were affiliated with one another and likely operated out of Russia."276 Facebook stated that the majority of the ads did not specifically reference the election or a particular candidate but rather "appeared to focus on amplifying divisive social and political messages across the ideological spectrum—touching on topics from LGBT matters to race issues to immigration to gun rights."277 The revelations were particularly troubling coming less than two months after a Facebook spokesperson told CNN, "We have seen no evidence that Russian actors bought ads on Facebook in connection with the election."278

Once again, Facebook is being accused of a lack of transparency. Senator Mark Warner (D-VA) believes that the company's latest admission is "the tip of the iceberg" when it comes to social media platforms having facilitated interference in the U.S. election process.²⁷⁹ Facebook also came under fire for its initial refusal to release the ads themselves to the media or congressional investigators, arguing that doing so would violate its data policies and privacy rules.²⁸⁰ The exact wording of the ads may be critical, as a Yahoo News article explained:

If the ads explicitly advocated or boosted one candidate or another, they would fall squarely under a federal law that bars foreign nationals from spending money to influence a U.S. election, making the individuals who paid for the ads—and any U.S. persons who might have assisted them—subject to criminal prosecution by the Justice Department and to heavy fines by the Federal Election Commission.²⁸¹

Facebook's response is being heavily scrutinized in part because of its self-created credibility gap—its claim that it had no evidence that Russia had bought ads on Facebook shortly before revealing the opposite. As an article in The Verge noted, Facebook's acknowledged history of glitches "suggest a sloppiness with data practices that places anything Facebook says about ad-buying efforts—the number of ads bought by fake pages, for example—under a cloud of suspicion." Some critics have reacted by calling for greater oversight of Facebook and other tech platforms, including requiring stricter disclosure requirements for political ads placed online. Some critical ads placed online.

After two weeks of widespread criticism, Mark Zuckerberg announced in a Facebook Live video that the company would turn the ads in question over to the Senate and House intelligence committees.²⁸⁴ In the same message, in

an apparent response to the growing calls for regulation, Zuckerberg said, "[Facebook is] going to make political advertising more transparent."285 He explained plans to voluntarily apply the same disclosure rules requiring identification of who paid for political ads shown on television to political ads on Facebook. According to Zuckerberg, users will be able to view the page that paid for the political ad, and additionally, users will be able to click on the page and see what other advertisements it is running—and which audiences those advertisements are targeting.²⁸⁶ In October, Facebook released additional details, including tightening restrictions on advertiser content, increasing requirements for authenticity, and establishing industry standards and best practices. "We care deeply about the integrity of elections around the world.287 We take responsibility for what happens on our platform and we will do everything we can to keep our community safe from interference," wrote Joel Kaplan, VP of Global Public Policy.²⁸⁸

Microtargeting: A Powerful Tool for Any Misinformation Campaign

Questions about how Russian actors attempted to sway the U.S. election through Facebook are closely connected to questions about microtargeting, its use, and its effectiveness. Microtargeting is the ability to use large sets of data, including internet users' personal information, to serve them with ads that are specifically tailored to their personal experiences and characteristics.²⁸⁹ It allows politicians to focus distinct messages on even very small groups of people across the country, whom algorithms can identify as particularly interested in (or, to put it more cynically, particularly susceptible to) a certain political message.²⁹⁰ Effective microtargeting has been listed as a reason for the political success of both the Obama campaign in 2012 and the Trump campaign in 2016.291 The data-mining firm Cambridge Analytica has argued that its microtargeting efforts on behalf of the Trump campaign were the "secret sauce" that enabled Trump's election win, though others have found this claim implausible.²⁹²

Privacy advocates and civic watchdogs began warning that microtargeting could lead to an unprecedented degree of voter manipulation²⁹³ even before fraudulent news became a major concern, and some believe the combination can be lethal to democracy. As one digital expert noted, microtargeting allows fraudulent-news purveyors to spend little money to get out a message that is tailored "to home in on individuals down to the zip code."²⁹⁴

This message was brought home with particular force amid the realization that Russia apparently used microtargeting in its misinformation campaign during the 2016 election. FBI investigators are reportedly probing whether it was part of the alleged collusion between the Trump campaign and Russia. PAGE 10.

Microtargeting draws its effectiveness from the vast amount of online data that virtually every internet user



provides to third parties, from people's online buying habits, to their Facebook likes, to their search histories.²⁹⁷ Facebook and Google draw much of their profit from ad services sold to parties that seek to utilize this pre-gathered info.298 Facebook, for example, offers a paid posting option for ads that are shown only to certain pre-chosen voters-or even to a single voter-and will otherwise not be public.²⁹⁹ The informal name of this advertising option is "dark posts," which takes on a sinister context in the context of fraudulent news.300

The effectiveness of microtargeting is not yet fully understood: Because it's a relatively new phenomenon, there is little data on how effective microtargeted ads are at persuading people to adopt a given point of view or believe certain information. Indeed, more research is needed to determine precisely these points, so that American decision makers can better understand the seriousness of the issue when evaluating potential solutions. In addition, more transparency is needed on how microtargeting is actually being used by fraudulent-news purveyors, and companies like Facebook and Google are the only ones who can offer such transparency. When it comes to microtargeting, the American public cannot be kept in the dark.

The Road Ahead: Promising Approaches and Challenges

As one of the most important factors in the spread of fraudulent news, Facebook carries a special responsibility to fight back against it. PEN America recognizes the efforts it is making to do so. Many of its new initiatives show signs of promise, including its efforts to cut off sources of advertising revenue for purveyors of fraudulent news and to adjust algorithms so that its News Feed and Trending sections surface more credible information and de-emphasize clickbait, fake news, and other forms of misinformation. However, as noted above, Facebook should strictly limit its efforts to target purveyors of demonstrably false, intentionally deceptive information and should establish an appeals mechanism for those who believe that their websites should not have been targeted in these efforts. Facebook should also instruct personnel involved in identifying purveyors of fraudulent news to err on the side of inclusion when deciding which sites to de-emphasize in algorithms or block from ad services, in order to protect robust political discourse.

PEN America encourages Facebook to continue working to identify other ways to thwart attempts to profit from spreading demonstrably false information, and how it can continue to improve the quality of the news articles that appear in the News Feed and Trending sections. At the same time, Facebook should support, through funding and partnerships, efforts like news literacy initiatives and fact-checking projects. These measures are not only compatible with strong protections for free expression, but also bolster it further by equipping internet users with better skills and tools to help them process the torrents of information they see online.

Support News Literacy Efforts: Facebook should expand its efforts to introduce users to news literacy education by exploring partnerships with news literacy organizations (discussed in detail below) and featuring news literacy information on its platform in a highly visible format.

Increase Fact-Checking Efforts: Facebook's partnerships with independent fact-checkers are a good start, but in order to make a serious dent in the quantity of false information flowing across its platform, they must dramatically scale up their efforts in this area. As noted above, Facebook's fact-checking partners are currently able to check only a handful of articles for the site each week because of the labor-intensive nature of the process. They need additional staff, and additional funds, to increase their capacity.

Expand Related Articles: Facebook's change to show "Related Articles" beneath a link to a news story before a user clicks on that link is particularly promising because it will signal to a reader whether the story has been weighed in on by fact-checkers while simultaneously showing the reader perspectives on the same topic from publications at other points on the political spectrum. Facebook should look at whether this approach could be adopted on other areas of the platform (for example, whether a similar strategy could be incorporated into the Trending section.)

Improve Transparency: Considering Facebook's enormous reach and influence, and the sheer quantity of information shared on its platform every second, the choices that it makes about what can be shared and what will be blocked will affect access to information for billions of people. It has unprecedented power to engineer our information ecosystem. If Facebook doesn't explain how it is tweaking its algorithms, or share more information about how effective its new initiatives have been, then the public has no way of knowing whether any efforts are making a difference. Equally important, the public has no way of knowing whether these changes are being implemented in an even-handed and non-partisan way.

Academic researchers, policymakers, fact-checkers, and others are calling on Facebook to increase its transparency. While PEN America recognizes Facebook's desire to protect its users' privacy, it must work harder to identify ways it can maximize the amount of information it shares, so that researchers can investigate how well its approaches to curbing fraudulent news are working, fact-checkers can identify ways to improve their work and its impact, and the public can understand more about how information is presented to them on the platform.

Facebook can also improve transparency by establishing an ombudsperson for the company, whose mandate includes publicly and independently critiquing decisions made by the platform, explaining the reasoning behind Facebook's approaches and decisions to controversial subjects, and responding to concerns raised by Facebook users, policymakers, and the general public.

GOOGLE

Days after the 2016 election, a fraudulent news story published by the website 70News.com alleged, falsely and with fabricated information, that President Trump had won the popular vote. Just one of many fraudulent news stories that proliferated in the aftermath of election, it entered the limelight after Google's search algorithm pushed it to the top of its search results for the query "final election results." With 70News.com getting prominent display on the most powerful search engine in the world, its popular-vote falsehood went viral. That a search for a simple fact could yield, at the top of search results, patently false information illustrates the power of search engines to enable the spread of fraudulent news.

Like Facebook, Google is an extremely powerful and influential company. "Every business trying to reach mass-market consumer demand online knows that Google is the gatekeeper," Jonathan Taplin, a professor at the University Southern California's Annenberg School and a longtime critic of the company, wrote in *The New York Times*. "It's Google's world; we just live in it." 303

Google affects what people see on the internet not only through its search algorithms³⁰⁴ but also through its Google News feature³⁰⁵ and its online advertisement program, AdSense.³⁰⁶ Google News was introduced in 2002 and provides a one-stop shop with access to more than 50,000 media outlets, all searchable by topic and sortable chronologically.³⁰⁷ Google's AdSense platform places thirdparty advertisers on millions of websites³⁰⁸ and in 2015 generated a fifth of Google's revenue.³⁰⁹

Google, which adopted "Don't be evil" as a code of conduct motto soon after its founding, 310 has reputational incentives to avoid being viewed as an enabler of fraudulent news, while simultaneously facing financial incentives to promote maximum traffic, views, and clicks on articles—of which fraudulent news is an unfortunately thriving subset. "Nothing drives clicks better than when the headline is exactly what people want to hear or believe," Ian Schafer, chief executive and founder of digital agency Deep Focus, told *The New York Times*, referring specifically to Google.³¹¹

Google Search: The World's Gateway to Online Information

Google is best known for its search engine, although today that is just one of a set of Google products and services. Other important Google products, particularly as they relate to the phenomenon of fraudulent news, include:

- Google News, a platform that acts as a news aggregator of content from thousands of publishers³¹²
- Google AdSense, an online advertising program that provides revenue for over two million online publishers³¹³

Google Domains, a website-hosting service³¹⁴

Google Search is not only Google's flagship product but also the single most frequent way that people around the planet get information or are directed to a site. Google has 81 percent of the global online desktop search market and 97 percent on mobile devices. The next biggest is Microsoft's Bing, at 7 percent for desktop; and Yahoo at 1 percent for mobile. The world's largest search engine, Google handles 3.5 to 5.5 billion to searches a day—or at least two trillion a year. Because of its size, influence, and de facto role as a gateway to information of all kinds, many commentators argue that it bears special responsibility to rein in the staggering quantities of misinformation found online. The staggering quantities of misinformation found online.

The power of Google's search engine³²⁰ mostly lies in its page-ranking formula, which uses at least 200 factors to rate a website's authority, including looking at how many links point to it and the importance of who is linking to it based on the same concept.³²¹ The page-ranking formula sorts through hundreds of billions of web pages, then surfaces what it concludes are the most useful and relevant results for each search.³²²

Google's complicated algorithms are proprietary, so all that is known about how they work is the little that Google shares, publicly available patents, and research that can be done without access to Google's internal information. 323 Google has stated that it will not share specifics about its algorithms for competitive reasons and also to reduce the potential for abuse of its system—certainly a concern in the context of fraudulent news, when many purveyors seek to exploit platforms like Google to maximize their reach and revenue.³²⁴ While these may be valid rationales, the lack of transparency around Google's algorithms hampers the ability of researchers, policy makers, and the public to review Google's approach to fraudulent news in anything other than a piecemeal way. The lack of transparency also renders opaque one of the most important determinants of how people all over the world obtain news and information about current affairs, politics, history, and just about everything else.

Google searches, at least 3.5 billion of which are conducted each day from computers or personal devices, 325 have behind them a remarkable implicit authority and practical power. The top results in a search are the most accessible and most accessed answers to users' queries. 326 The very fact that they appear at the top of the results, and are what the algorithm has determined are the best answers to consumers' queries, imbues them with credibility whether it is deserved or not.

Google Search Algorithms and Fraudulent News

Google reports that it has been tweaking its algorithm for years in an attempt to get more trustworthy results to rise to the top of a search.³²⁷ The company says that



Query and User Intent	Result Block and LP, Flags	Explanation
	Top 10 reasons why the holocaust didn't happen Stormfront Stormfront > > History & Revisionism	This result should receive the larger than the tourt artistic service of the state of the count and the service of the service of the service of the direct relationship between Holocaust denial and anti-Semitism, many people would consider it offensive. This result should receive the linear than a distribution of the service of the service of the direct relationship between Holocaust denial and anti-Semitism, many people would consider it offensive.
Query: [holocaust history]	Dec 19, 2008 - 10 posts - 8 authors History & Revisionism Reexamining history, particularly the court historians' version of World War II The Holocaust Lie more than anything else keeps us down. The twin themes of	
Locale: English (US)	Pom: No Foreign Language: No Did Not Load: No Upsetting-Offensive: Yes	
User Location: New York, NY User Intent: Find historical information about the Holocaust.	The Holocaust - World War II - HISTORY.com History Channel - topics - the-holocaust	While the Holocaust itself is a potentially upsetting topic for some, this result is a factually accurate source of historical information. Furthermore, the page does not exist to promote hate or violence against a group of people, contain racial slurs, or depict graphic violence. Do NOT assign the Upsetting-Offensive flag.
	To the anti-Semitic Nazi leader Adolf Hitler, Jews were an inferior race, an alien threat to German racial purity and community. After years of Nazi rule in Germany, during which Jews were consistently persecuted, Hitler's "final solution"—now known as the Holocaust—came Videos - Pictures - Holocaust Concentration Camps	
	Porn: No Foreign Language: No Did Not Load: No Upsetting-Offensive: No	

An example from Google's manual for quality raters of what qualifies as "upsetting-offensive."360

currently, only one-quarter of one percent (0.25 percent) of its billions of daily queries have been returning "offensive or clearly misleading content."328 "That's a very small number," a Google spokesperson told PEN America.³²⁹ "I don't want to take away from the impact that has. Clearly if you are getting something offensive or deliberately misleading, that's upsetting to anyone. You are never going to solve this 100 percent because you've got tens of thousands of pages coming on the web every day."330

Of course, even a small amount of misleading content can have an outsize impact when it comes to controversial issues of high cultural relevance, like race, religion, gender, and politics. And these are precisely the areas where fraudulent news proliferates.

Perhaps the biggest danger is that this misleading information can be viewed as having an implicit stamp of approval from Google if it ranks highly in the search results. This danger is heightened when considering Google's "best answer," or "featured snippet," function, designed to provide quick answers that appear at the top of the screen to Google queries that attempt to find factual information.³³¹ In many ways this is a remarkably useful feature: If one Googles "what is today's date?," Google quickly provides the answer. With other, more complex queries, Google will suggest an authoritative response from a relevant web page.332 Because such answers carry what comes across as an imprimatur from Google, readers may be inclined to credit them even if the information is wrong.

A selection of disturbing results that have surfaced as

featured answers at the top of Google Searches throughout the years:

- In 2014, when Google was asked "Who is the king of the United States?" the top answer Google returned was Barack Obama.333
- In December 2016, a Guardian writer asked Google if women were evil. Google returned this snippet at the top of the page as its best answer: "Every woman has some degree of prostitute in her. Every woman has a little evil in her.... Women don't love men, they love what they can do for them. It is within reason to say women feel attraction but they cannot love men."334
- In March 2017, the digital publication The Outline noted that the question "Did the Holocaust happen?" returned as its top response a Holocaust-denial piece from the neo-Nazi website Stormfront. The Stormfront piece also offered suggestions on how to convince people the Holocaust never occurred.335 The Outline article also included Google's best answer to how many U.S presidents belonged to the KKK: four.336 (In fact, none have.)
- As of September 2017, a Google query asking "Who is the first black president?" surfaces, as its top answer, a blog page claiming there were seven black presidents before Obama, including Abraham Lincoln and Dwight D. Eisenhower.³³⁷

On October 2, 2017, in the aftermath of the Las Vegas mass shooting, the 4Chan comment thread /pol/, an internet community "infamous" for "spreading misinformation and fake news," according to Mashable, falsely and without evidence asserted that a person named Geary Danley was the shooter.338 Subsequently, two of the top four Google "Top Stories" results for "Geary Danley" incorrectly identified him as the shooter. In response, Google released a short statement that said in part, "This should not have appeared for any queries, and we'll continue to make algorithmic improvements to prevent this from happening in the future."339 But a Washington Post reporter found that "hours after the real shooting suspect—a different person—was identified, the entire first page of Google results for a search for Geary Danley's full name was links to news sites, YouTube videos, message boards, and even several /pol/ threads repeating the rumor about him."340

Google's autocomplete function, which predicts the content of a search based on what other people are searching for, can also point users in some troubling directions. Tor example, if one starts Googling "roses are red," Google suggests the autocompleted search term "roses are red violets are blue." But type in certain terms related to race, religion, gender, or sexual orientation, and autocomplete has suggested searches that affirm harmful stereotypes and smears, presumably because other users have completed their searches in these ways. In December 2016, Google altered some autocomplete suggestions to avoid issues where typing, for example, "are Jews" into Google Search would result in "are Jews evil" as a top suggested search. 342343

Google's role in inadvertently promoting misinformation goes beyond best answers and autocomplete. The search engine's results for queries related to Islam, for example, have raised concerns. Omar Suleiman, an imam in Texas, told the Huffington Post in June 2017 that the search engine perpetuates negative stereotypes using false information, doing "irreparable harm" to Muslims. 344 Search terms like "sharia" or "jihad," the article stated, instead of pulling up neutral or scholarly discussions of the terms' significance in Islam, instead can return links to Islamophobic sites filled with misinformation. 345

Suleiman's current solution—through his foundation, the Yaqeen Institute for Islamic Research—is to try to adjust search results by publishing reports online addressing controversial topics on Islam with more accurate information, "to flood the search results with accurate information in Islam." But while Suleiman and other civil society actors may be able to provide alternative information to counter misleading information, it is Google's algorithms that are the ultimate determinant of which articles appear

first in search results. It is not clear that even the most determined civil society efforts to flood the system with credible information could begin to reshape the results generated by Google's opaque algorithms.

Updating Algorithms and "Quality Ratings"

In April 2017—notably, soon after the Outline article criticizing Google as "promoting conspiracy theories and misinformation" ³⁴⁷—Google announced a set of changes to Google Search. ³⁴⁸ Ben Gomes, vice president of engineering for Google Search, explained the rationale for the change in an April blog post: "In a world where tens of thousands of pages are coming online every minute of every day, there are new ways that people try to game the system in order to appear higher in search results—using low-quality 'content farms,' ³⁴⁹ hidden text and other deceptive practices ... The most high profile of these issues is the phenomenon of 'fake news,' where content on the web has contributed to the spread of blatantly misleading, low-quality, offensive or downright false information." ³⁵⁰

Google announced four changes:

- New "direct feedback" tools that more easily allow users to indicate whether featured snippets or autocompletes were offensive or misleading, with the information serving as feedback for Google to consider when updating its algorithms. (This feature was in fact first rolled out in February but has since become a permanent feature.)³⁵¹
- Algorithm changes designed to "surface more authoritative pages and demote low-quality content." Gomes noted that these changes were explicitly intended to help prevent issues such as high-ranking Holocaust-denial results.
- Additional openness around Google's transparency and content policies.³⁵³
- A new set of guidelines for Google's "quality raters." 354

The fourth point requires further explanation: Google's "quality raters" are a 10,000-strong army of independent contractors. Tontractors do not directly remove posts but instead are given actual queries to use in conducting searches. They then rate the results based on a Google manual that describes a vast range of potential problems. They analyze whether the results meet users' needs or whether they are spam, porn, illegal, or from low-quality websites. They are spam, porn, illegal, or from low-quality websites. The raters' findings are used to adjust algorithms and otherwise address the problems they identify.

In April, as part of its set of changes designed to address fraudulent news, Google added the new category





Duke Reporters' Lab and Google widget

of "upsetting-offensive" for contractors to use as a reason to de-emphasize a website from Google's results. 358 A prime example of the use of this flag is in relation to Stormfront, a site that promotes white supremacy and Holocaust denial.359

"Upsetting-offensive," of course, requires a far more subjective assessment than other flags such as illegality or slow load times. Stormfront publishers would presumably not define the site as upsetting-offensive.

Today, Holocaust-denial posts like Stormfront's "Top 10 Reasons Why the Holocaust Didn't Happen" still appear in searches, but they are buried deep within other results on the Holocaust. (PEN America, searching for "Did the Holocaust happen" in September 2017, found that the first Holocaust-denial page was found on page 7 of Google's results.)³⁶¹ Since most people never get past the first page of suggestions, it's unlikely that such Holocaust-denying posts would be easily seen, other than perhaps by people seeking out Holocaust-denial theories.³⁶²

This brings up an important question: Can Google's altering of its own algorithms amount to a form of content censorship? Stormfront, with its peddling of blatantly false and offensive Holocaust denialism, is perhaps the least sympathetic party to cry "censorship." But just as a few changes to Google's algorithms can dramatically reduce the spread of malicious misinformation such as Holocaust denialism, absent appropriate safeguards so too could a far greater subset of controversial speech eventually be labeled "upsetting-offensive," "low-quality," or "non-authoritative."

It is telling that Gomes, in his April 2017 post on Google's new changes designed to deal with fraudulent news, referred to the changes as "algorithmic updates to surface more authoritative content."363 "Algorithmic updates" is a studiously neutral term, implying a technical solution to a technical glitch. Fraudulent news, however, is not just a technological problem but a problem about the way humans form and disseminate information, beliefs, and falsehoods. While the solutions may be technical, the motivations and considerations behind them inevitably implicate moral and intellectual decisions about what content to privilege and what to de-emphasize. While technology and social media companies may prefer to skirt such complex and fraught issues, their predominance in how news and information are transmitted—and acted upon—in society make such avoidance impossible.

Recognizing the potential for fraudulent news to impair public discourse and impinge on freedom of expression, PEN America recognizes the validity of measures to ensure that individuals seeking accurate information are not instead offered known, demonstrable falsehoods. While few may object to Google de-emphasizing Holocaust-denial pages and websites in its search results, as these sites do not provide accurate information to users who are not specifically seeking out denialist theories, more difficult questions arise from the many matters where facts and falsehoods are more widely—and sometimes credibly-disputed. When it comes to information on experimental medical treatments, the causes of international conflicts, or the existence of gender differences, for example, rejecting certain facts in favor of others can be construed as taking sides or evidence of bias. As it works to address the problem of fraudulent news and false information as it appears in search results, Google should take an informed, considered, and transparent approach to addressing these controversial matters, striving to ensure that its systems avoid unjustifiably discrediting certain views and ideas.

Google should also be inviting a more public conversation as to when and how to de-emphasize fraudulent news in a way that does not create a harmful precedent that would allow the owner of the world's most ubiquitous search engine to discriminate between different types of speech.

Beyond the broader questions that arise from Google's algorithmic updates, there are further lessons. Google, unsurprisingly, appears to respond most forcefully to the issue of fraudulent news and misinformation when the problem becomes the subject of public scrutiny and pressure, especially in a way that threatens reputational damage to the powerful brand.³⁶⁴ For things to change, Dartmouth College political scientist Brendan Nyhan told PEN America, platforms like Google have to take steps and civil society has to keep pressuring them.³⁶⁵ "The external pressure from the media and other kinds of stakeholders can actually work," Nyhan said. "There are lots of people inside Google and Facebook who are horrified by what the platforms are enabling. External pressure helps them move the needle internally on making changes and passing up a little more profit."366

While some purveyors of fraudulent news do so for political or ideological reasons, others have a more mercenary motivation: The outlandish nature of fraudulent news drives site traffic, which leads to real money from online advertising.

Google's current approach to the problem of false news suffers from inherent limitations. Individuals, political partisans, and companies will always continue to try to spread false and misleading information through Google's search engine as long it's profitable or can boost audiences or ideologies. As soon as one area of problematic content is fixed, another pops up. People will continue to attempt to publish falsehoods online, making any effort that is purely dependent on post-publication investigating and de-emphasizing akin to an online game of whack-a-mole. As a result, a more comprehensive solution to fraudulent news will require additional forward thinking and a proactive approach by Google as well as other actors in the information ecosystem.

Educated, engaged consumers are likely the most powerful agent of change shaping Google's decision-making on these questions. In early October, Google Canada contributed \$500,000 to News Wise, a new news-literacy program in Canadian elementary and high schools.³⁶⁷ (This report examines the potential of news literacy programs in a subsequent chapter.) Google's support for News Wise is a positive step toward proactive engagement.

Another early but encouraging step is Google's plan to eliminate its "first click free" policy—which allowed readers to access several articles behind publishing paywalls without subscribing—and to develop new tools to help publishers determine which Google users are potential subscribers. The moves have been described as "an olive branch to publishers," most notably newspapers and other journalism outlets. Philipp Schindler, Google's chief business officer, described the moves as "an attempt to try to create a new world—a better world—for journalism. Google's efforts to support purveyors of quality journalism are an encouraging step forward in fighting fraudulent news not by removing information but by assisting those who credibly provide correct information.

Google and AdSense: The Power of Online Advertising

Search results are not the only way that Google wields substantial power over what people see online. There is also online advertising. The world's biggest online advertising program, AdSense, is a Google program. AdSense allows

bloggers and website owners to make money by displaying third-party ads administered and maintained by Google. Website owners rent out space on their websites for ads that Google sells and serves on their behalf.³⁷¹

Advertisers pay Google for the advertising space, and Google in turn pays the website owners hosting AdSense ads a percentage of the profit, dependent on how popular the website is and how many people click on the ads.³⁷² Almost two million publishers use the program today, and in 2015 it accounted for one-fifth of Google's revenue.³⁷³ Online advertising also provides the financial lifeblood for many websites, including many bloggers and other digital publishers.³⁷⁴

While companies have some say over where their ads appear, online advertising campaigns are generally tailored to focus on reaching the best potential customers wherever they may be. As Michael Tiffany, the founder of an ad fraud detection company, put it in a December 2016 interview with *The New York Times*: "A lot of ad buying systems are trying to show the right ad to the right person at the right time, and you see that mantra of those three variables across the industry. Note how 'on the right site' doesn't make the list." For companies that partner with Google to have their ads posted across thousands of different sites, it can be difficult to ensure that all these sites are ones with which they want to be associated. 376

For fraudulent-news purveyors, AdSense and other online advertising programs are integral to the financial success of their misinformation ventures.³⁷⁷ While some purveyors of fraudulent news do so for political or ideological reasons, others have a more mercenary motivation: The outlandish nature of fraudulent news drives site traffic, which leads to real money from online advertising.

AdSense offers the widest display of programmatic ads on the web, BuzzFeed News media editor Craig Silverman told PEN America. Compared with competing online advertising programs, Silverman said, "you get paid more from AdSense than the lower tiers." AdSense, he added, "was monetizing fake news sites for a long time. Google only put in real effort to stop it at the end of last year," after controversy erupted.³⁷⁸

One example of this dynamic was captured in February 2017, when Wired magazine sent reporter Samanth



Aerial of the Googleplex core buildings

Subramanian to Veles, Macedonia, to explore the fake-news industrial complex that some inhabitants, mostly teenagers and young men, were running during the election.³⁷⁹ The reporter found one teen, "Boris," who had made nearly \$16,000 running two pro-Trump websites (USAPolitics.co and PoliticsHall.com) bursting with fraudulent stories, largely stolen wholesale from other websites, between August and November 2016.³⁸⁰ Traffic to the sites "was rewarded handsomely by automated advertising engines, like Google's AdSense." ³⁸¹ In an economically depressed area where the average monthly wage is \$371, Boris's fraudulent-news sites-running false stories such as the pope's endorsement of Donald Trump-provided him enough money that he dropped out of high school soon after publishing his first fraudulent article. 382 In September 2017, CNN reporters in Veles shared a similar story from "Mikhail," who claimed to have been making up to \$2,500 a day from fraudulent news, with his profits "com[ing] primarily from ad services such as Google's AdSense."383

Google's expanded efforts to crack down on fraudulent news include actions designed to disrupt fraudulent-news purveyors' ability to monetize misinformation through AdSense.³⁸⁴ On November 14, 2016, the search giant announced a new policy to curb access to AdSense for web publishers that deceive or distort the truth.³⁸⁵ It would crack down on misinformation by forbidding Google-served advertising on sites that "misrepresent, misstate, or conceal information" about the publisher, the publisher's content, or the primary purpose of the site.³⁸⁶ Any site designed to look like legitimate news and deceive, without a disclaimer if it is satire, would be in violation of Google's policy.387

By the end of Google's fourth quarter last year, after investigating 550 sites for deceptive content, including some that impersonated news organizations, the search giant had taken action against 340 sites and had permanently kicked 200 publishers off its AdSense network. 388 This tactic was apparently effective in dissuading Boris from continuing to run USAPolitics.co and PoliticsHall. com; these sites were stripped of their AdSense ads and sponsored links on November 24. In response, Subramanian reported, "Boris lost interest" in the fraudulent-news sites and abandoned them "to the deep oblivion of the internet."389 Since November 2016, USAPolitics.co has only published three additional articles, including an unattributed The New York Times article about Trump's golfing habits.³⁹⁰ PoliticsHall.com is essentially defunct.³⁹¹

While these actions may have been effective against small-scale fraudulent-news entrepreneurs, Google's approach is reactive and case by case; it is not clear what portion of fraudulent sites have been blocked. Unless would-be scammers become convinced that Google will quickly find them out, they will continue to try to game the system (by creating a new web domain that has not yet been blacklisted by Google, for example). "Mikhail" from CNN's story acknowledged that while his sites had suffered from efforts by Google and others, he was "retooling his operation, with his sights set firmly on the 2020 presidential election." ³⁹² Both habitual user reporting of fraudulent sites and affirmative efforts by Google to verify its business partners on AdSense are essential to ensure that fraudulent-news policing efforts are effective and also serve as a deterrent to would-be scammers.

Silverman, who leads BuzzFeed's reporting on AdSense and fraudulent news, said that Google engineers should have discovered and corrected apparent oversights on Google's search engine that as recently as April allowed more than 60 websites that publish false news stories to continue to earn money from online advertising networks.³⁹³ Google AdSense, while not the only network implicated, was the second-most-common ad network for the fraudulent-news sites.³⁹⁴

Silverman's story noted that in some cases, a site will mix real news with hoaxes and satire,³⁹⁵ requiring a more nuanced determination of whether a full cutoff of AdSense is warranted. He also reported that some sites that were kicked off AdSense simply moved to Revcontent and Content.ad, competing online advertising programs that continued to finance their output.³⁹⁶

Silverman points to Google's primacy in the online ad space while acknowledging that an industry-wide, collective solution may be necessary to comprehensively address the issue of enabling online fraudulent news.³⁹⁷ Google has "the resources and tools to do things on a much faster basis," Silverman told PEN America. However, "when I talk to people who run dubious sites, because they look at them as cash registers, the second Google or Facebook shuts them down, they find another way to game the system."³⁹⁸ Information sharing across ad networks would help ensure that once a website is shut down as fraudulent, it can't simply tap into a new source of revenue.

Fact-Checking Features as a Tool to Address Fraudulent News

Since late 2016, Google has been implementing fact-checking features within Google News and, to a certain extent, its much more popular Google Search.³⁹⁹ Google added a "Fact Check" tag in Google News for news stories last October⁴⁰⁰ to flag articles that a news publisher or independent fact-checking outfit has verified. In April, it fine-tuned its fact-checking efforts by adding a feature that puts "Fact Check" labels on Google News and search results.⁴⁰¹ It also gave greater prominence to fact-checking in June 2017 by adding a dedicated "Fact Check" block for Google News, containing articles from fact-checkers and fact-checking organizations that evaluate claims currently circulating in the news or among the public.⁴⁰²

In late June, Google redesigned the Google News page to make it easier to read and offer different perspectives on news events.⁴⁰³ To do this, it created new "story cards"

that offer a variety of perspectives on a topic. 404 Click on a card, and "that gives you related coverage, opinion pieces, in-depth, more articles," a Google spokesperson told PEN America. 405 "On the right is a gadget that also provides related sites and stories and also video. And within that page there is a diversity of publishers, from Fox to local radio and from CNN to Yahoo Finance." 406 The diversity of sources offered in these story cards may help users see a broader range of perspectives on the news, chipping away at the "filter bubble" that contributes to the insular information environment in which fraudulent news takes hold.

For a "Fact Check" citation from Snopes.com or other independent fact-checkers to be included in a Google search or Google News, the verification must meet Google's criteria. ⁴⁰⁷ An article verified as fact-checked must be composed of straightforward claims of fact so that readers can easily understand what was researched in the fact check. The fact checkers' sources and methods must also be disclosed, with citations and references to the primary sources upon which conclusions are based. If Google determines that these criteria have not been met, it reserves the right to ignore or remove the fact check. It should also be noted that Microsoft's Bing, America's second largest search engine, similarly added "Fact Check" labels to its search results in September 2017. ⁴⁰⁸

Google and the Duke University Reporters' Lab also created a widget—an add-on to what the user sees when using the platform-called "Share the Facts," 409 designed to help spread fact-checked articles to a wider audience.410 "Reporters, columnists and bloggers can embed the widget in articles and blog posts in the same way as tweets," according to Share the Facts' website, 411 so the widget could appear in a reporter's story, blog or tweet. "For example, political writers can compile widgets for all the fact checks of a debate or all of the articles about a particular candidate." 412 The widget can also be posted to appear in one's Facebook feed.⁴¹³ According to Share the Facts, its partners have created more than 10,000 fact checks with this widget since Share the Facts's launch in 2016.414 But given the newness of the initiative, it is less clear how people are responding to or evaluating the widget's message.415

Google does not fact-check these stories itself; instead, it highlights articles that have already been fact-checked by non-partisan groups, such as Snopes or PolitiFact.⁴¹⁶ "These fact checks are not Google's and are presented so people can make more informed judgments," Google said in April.⁴¹⁷ "Even though differing conclusions may be presented, we think it's still helpful for people to understand the degree of consensus around a particular claim and have clear information on which sources agree."⁴¹⁸ The search company is not paying for the fact checks and includes them only for stories considered news—not opinion.⁴¹⁹

There has been a significant amount of enthusiasm for fact-checking features as part of the solution to



Fact-checking organizations do not currently have the bandwidth to provide a comprehensive approach to fraudulent news. Today, the truth is that most news articles on Google News come with no fact-check labels at all.

fraudulent news. Fact-checking promotes news literacy in real time, it can take the form of partnerships between private entities and specialists or nonprofits, and it is a far more free-speech-friendly solution to fraudulent news than blocking or restricting sources of misinformation.

But Google's fact-checking efforts still possess several drawbacks. One significant problem is the burden it represents on a reader's time. Digital media strategist and former journalist Heidi Moore, writing about Google's algorithm shifts in The Washington Post, noted: "Readers not only have to read the news but then seek out fact checks of what they just read. It's a lot of work-more than most people are willing to put in."420

Additionally, while Google is wise to highlight the work of fact-checking organizations that possess relevant expertise, avoiding conflicts of interest that might arise if the company tried to check facts itself, its reliance on their work means that fact-checking occurs at a significantly slower pace than Google could itself accomplish given its vast resources. Fact-checking organizations do not currently have the bandwidth to provide a comprehensive approach to fraudulent news. Today, the truth is that most news articles on Google News come with no fact-check labels at all. If fact-checking represents a significant component of Google's approach to solving the fraudulent-news crisis, it will need to consider ways to get this effort to scale. The solution may be a more robust, formalized partnership between Google and outside fact-checkers, with Google committing more resources to its partners. This approach also has the advantage of allowing for more transparency in fact-checking processes than an in-house program at Google likely would.

Beyond this, Google should take steps to make sure Fact Check tags are more easily visible: Google News's new Fact Check column, for example, is found halfway down the page, while the Fact Check tag remains rare enough that the average Google News reader may not know what it entails. Fact-checking is virtually invisible when the Google search page is utilized to retrieve news results (as opposed to when a user goes to Google.News.com).

That is not to say that Google's fact-checking efforts are

not constructive. "Google has been a wonderful partner in all this," journalist and PolitiFact founder Bill Adair told PEN America.⁴²¹ "They've supported us from the start and been willing to take concrete steps to highlight fact checks in search results, and they worked with us in developing the widget. What they've done is a huge step forward. You can always make the case more can be done, but I'm pretty satisfied they've taken the steps they've taken. It speaks to their commitment."422

The Road Ahead: Promising Approaches and Challenges

Given Google's predominance as a search engine and conduit for news, it has a leading role to play in helping to address the present crisis. PEN America applauds the early steps that Google has taken to responsibly address the issue of fraudulent news. While recognizing these steps, we encourage Google to devote significantly more resources to the problem. Google has proven itself willing to respond to fraudulent news once particularly heinous examples are brought to its attention. However, rather than fix problems piecemeal, Google needs to consider a more proactive approach, which in turn will require a more substantial commitment of personnel and resources.

In doing so, Google must also ensure that its actions, particularly with respect to cutting off fraudulent news purveyors' sources of income and de-emphasizing fraudulent news in its algorithms, are narrowly tailored to protect freedom of information and to promote a robust and inclusive political discourse. Any action Google takes to push web pages higher or lower in its search results has an enormous impact on access to information for people around the world. Like Facebook, Google should strictly focus its efforts in these areas on the purveyors of demonstrably false information being presented as news with the intention of deceiving the public, and should also establish an appeals process for owners of websites that feel they have been unfairly targeted.

Focus on Accuracy in Google News and Best Answer Results: Google must be particularly cognizant of those respects in which it acts not merely as a search engine but Google News is a space for people seeking to be factually informed about world events. While it functions as a news aggregator, it is also a place where news is published. When Google uses its brand to declare that something qualifies as news, it has a duty to ensure that the information presented in that section is not false.

also in a role more comparable to that of a publisher. It is in these areas where Google takes a step away from being a neutral provider of the information that is on the internet, and toward a more a curatorial and editorial role, one that carries the heaviest responsibility to act affirmatively in rejecting fraudulent news.

While Google's "best answer" feature is offered simply with the goal of facilitating users' searches, this tool carries with it the unmistakable implication that it is true. Google has the responsibility to ensure that this is the case. Similarly, Google News is a space for people seeking to be factually informed about world events. While it functions as a news aggregator, it is also a place where news is published. When Google uses its brand to declare that something qualifies as news, it has a duty to ensure that the information presented in that section is not false. In this regard particularly, Google's efforts to indicate when news articles have been verified by independent fact-checkers should be further encouraged and expanded.

Expand Fact-Checking Efforts: Google should continue to expand its fact-check indicators to apply to a larger range of news and search results, and to make fact-check explanations clearly visible and accessible to users. Perhaps the biggest limitation of these initiatives is their current application to only a limited number of news articles. Google should explore more specific partnerships with dedicated fact-checking organizations to expand upon these efforts, including financial support to allow them to do so.

Support News Literacy Efforts: For all of the major technology and social media companies, one of the best defenses against the spread of fraudulent news on their platforms is to help equip users with tools and skills to evaluate the information they see and consume. Google should explore ways to feature news literacy information on the platform, and should support, through funding and partnerships, news literacy initiatives (discussed in detail below) more broadly.

Improve Transparency: Google Search, Google's flagship product, is the way that much of the world accesses information on current events.⁴²³ Google has understandable grounds for wanting to protect its proprietary information regarding how its search engine works. But the general lack of understanding regarding how Google's algorithms work and the impacts of changes to those algorithms inhibits outside experts and civil society organizations from playing a more constructive role in helping Google analyze and address the problem of fraudulent news. Further, given the importance and ubiquity of Google's search engine, the average user deserves to have a greater understanding of how it is built and how to interpret the search results produced for a particular query. Google should consider how it can offer more information to researchers and the public that enhances understanding of how its online searches are being conducted and how to process the information they produce.

Lead the Online Advertising Industry's Response: Google is already cognizant of the role that its online advertising engine, AdSense, plays in enabling or facilitating fraudulent-news purveyors who are motivated by financial gain. An industry-wide approach is needed to prevent fraudulent-news purveyors from jumping from one online advertising engine to another. Google, as the industry's leader, is best poised to play a coordinating role in ensuring that the industry acts in a concerted and ethical manner in these efforts.



Twitter headquarters

TWITTER

Few have made more enthusiastic use of Twitter than President Donald Trump, who regularly makes the news in 140 characters or fewer. (For now, anyway. Twitter is currently experimenting with expanding the limit to 280 characters.)424 "I think that maybe I wouldn't be here if it wasn't for Twitter, because I get such a fake press, such a dishonest press," Trump declared on Fox News in March.⁴²⁵ During the presidential campaign, Adrian Chen wrote in The New Yorker, "Trump used Twitter less as a communication device than as a weapon of information warfare, rallying his supporters and attacking opponents⁴²⁶ with hundred-and-forty-character barrages."427

Aside from his use of the platform as a tool to make political proclamations and policy-for example, tweeting the announcement of a ban on transgender people serving in the military⁴²⁸—the president uses Twitter to sow confusion and doubt about the credibility of the media and of opinion polls. Trump has tweeted the phrase "fake news" more than 100 times since taking office, often using it to smear news reports he doesn't like.429

Twitter launched on July 15, 2006,430 and has 328 million active users⁴³¹—relatively few compared with the 2 billion monthly users on Facebook. 432 Twitter's heyday, arguably, was in 2010-11, when it became a popular tool for pro-democracy protesters to help organize political revolutions in Libya, Tunisia, and Egypt. 433 But its growth has stalled, despite the president's fondness for it. 434 According to the Pew Research Center, about 21 percent of American adults used Twitter in 2016, far fewer than Facebook (68 percent) and also fewer than Instagram (28 percent), Pinterest (26 percent), and LinkedIn (25 percent). Twitter use jumps to 36 percent for young people ages 18 to 29.435

An Adobe media study found that Twitter was more popular as a news source among those 35 and under and that 39 percent of high schoolers, 51 percent of college students, and 41 percent of young professionals use Twitter to get news.⁴³⁶ (Only 23 percent of Americans over 35 get their news on Twitter.)437 The Pew Research Center concludes, "While a large share of users get news on the site (74 percent say they do), its audience is significantly smaller overall. This means that overall, fewer Americans get news on Twitter (11 percent of U.S. adults)."438 Even so, because Twitter is popular with the media and the president, its reputation and impact outranks its actual numbers. "It's where journalists pick up stories, meet sources, promote their work, criticize competitors' work and workshop takes," according to Farhad Manjoo, The New York Times' tech columnist. 439 "In a more subtle way, Twitter has become a place where many journalists unconsciously build and gut-check a worldview-where they develop a sense of what's important and merits coverage, and what doesn't. This makes Twitter a prime target for manipulators: If you can get something big on Twitter, you're almost guaranteed coverage everywhere."⁴⁴⁰

Twitter played a key role in many of the biggest misinformation campaigns of the past year, according to Manjoo. 41 False information travels on Twitter as easily and quickly as it does on Facebook—in some ways more so, because Twitter users can see and retweet posts with one click, even if they don't follow one another (provided a user has not adjusted their privacy settings). While Facebook makes it possible to "follow" people you're not "friends" with—as long as their privacy settings allow—Twitter was designed to make posts public, accessible, and searchable by topic. It also shows what topics and hashtags are trending across its platform.

However, many of the same features that allow fraudulent news to travel rapidly on Twitter also contribute to its unique strength as a platform for breaking news, and for bringing stories to the public eye that professional journalists may not be covering. Sociologist Zeynep Tufekci demonstrated that in 2014, when protests broke out in Ferguson, Missouri after the police killing of Michael Brown, Jr., Twitter users in Ferguson who were documenting the protests as participants or citizen journalists pushed the story into national view, bringing waves of journalists to the town and generating weeks of media coverage. In contrast, Tufekci observed that "Facebook's algorithm had 'decided' that [stories about Ferguson] did not meet its criteria for 'relevance'—an opaque, proprietary formula that changes every week, and which can cause huge shifts in news traffic, making or breaking the success and promulgation of particular stories or even affecting whole media outlets."442

Twitter differs from Facebook in other ways: It allows users to remain anonymous, while Facebook requires real names for accounts. (Facebook checks the validity of accounts flagged as "fake name" by other users;⁴⁴³ Twitter verifies the accounts of public figures and public interest organizations.)⁴⁴⁴ Unlike Facebook,⁴⁴⁵ Twitter is an open-source platform; it makes its data available.⁴⁴⁶ This is why many studies of social media focus on Twitter; researchers have repeatedly asked platforms to make data more accessible to help them design tools for better news consumption on social media.⁴⁴⁷

Twitter did not offer comment for this report. In September, it released a statement saying that it is continuing to work to identify and fight malicious accounts and applications on its platform.⁴⁴⁸ "With hundreds of millions of Tweets globally every day," the statement said, "scaling these efforts continues to be a challenge."⁴⁴⁹

The company also shared some initial findings from an internal investigation into the Russian misinformation campaign around the U.S. presidential election. Twitter suspended 22 accounts that corresponded to the roughly 450 accounts identified by Facebook as part of its internal inquiry.⁴⁵⁰ It says that it identified another 179 related or

linked accounts and "took action" on those that violated its rules. 451

On September 28, Twitter's vice president of policy, Colin Crowell, met with the Senate Intelligence Committee behind closed doors and shared a roundup of ads purchased by three RT (Russia Today) Twitter accounts that targeted the U.S. market in 2016.⁴⁵² The Russian government-backed media outlet spent \$274,000 on U.S. ads last year. "These campaigns were directed at followers of mainstream media and primarily promoted RT Tweets regarding news stories," the company concluded.⁴⁵³

Twitter also said it took down tweets that circulated intentionally misleading information about voting:

For instance: when we were alerted to Hillary Clinton "text-to-vote" examples, we proactively tweeted reminders that one cannot vote via text, examined the content reported to us, used our proprietary tools to search for linked accounts that violated our rules, and, after careful review, took action on thousands of Tweets and accounts. We have not found accounts associated with this activity to have obvious Russian origin but some of the accounts appear to have been automated.⁴⁵⁴

The Bot Problem: Automated Accounts That Promote False Information

In response to criticism that it is a conduit for the widespread dissemination of fraudulent information, Twitter has often argued that the platform's real-time environment means that bad information will quickly be corrected, as Crowell did in June:⁴⁵⁵

Twitter's open and real-time nature is a powerful antidote to the spreading of all types of false information. We, as a company, should not be the arbiter of truth. Journalists, experts and engaged citizens Tweet side-by-side correcting and challenging public discourse in seconds. These vital interactions happen on Twitter every day, and we're working to ensure we are surfacing the highest quality and most relevant content and context first.⁴⁵⁶

Twitter users can reply to other tweets or retweet them to followers, providing ways for users to flag information they believe to be fraudulent or to offer different perspectives on a topic. This is undoubtedly a pro-free speech approach to combatting fraudulent news, and in a sense a real-time test of the adage "The answer to speech you don't like is more speech." But as many Twitter users can attest, organized efforts by bots or trolls to push out a message (or attack an individual user) can be overwhelming, and it can be difficult—or impossible—to effectively disprove a fraudulent message being repeated on the platform multiple times a second by hundreds of different accounts.



The software-controlled Twitter accounts can form an automated or semi-automated army to push a certain message or manipulate conversations far faster and more cheaply than a human could.

Twitter is clogged with bot accounts that can follow, tweet, heart, and retweet-they essentially act like a person, but they're automated.⁴⁵⁷ Because they can amplify information instantly, and affect Twitter's algorithms, bots can be used for good (i.e. to spread public service announcements, raise awareness, motivate voters)⁴⁵⁸ or bad ends.⁴⁵⁹ Bots can spread false information and conspiracy theories quicker than they can be debunked. The software-controlled Twitter accounts can form an automated or semi-automated army to push a certain message or manipulate conversations far faster and more cheaply than a human could. One University of Southern California study found that about one-fifth of the discussion around the 2016 U.S. presidential election on Twitter was driven by bots.460

A study published in Computers in Human Behavior, a peer-reviewed journal, found that Twitter bots are often "perceived as credible, attractive, competent in communication, and interactional. Additionally, there were no differences in the perceptions of source credibility, communication competence, or interactional intentions between the bot and human Twitter agents."461

Bots are effective and proliferating. In March, researchers determined that between 9 and 15 percent of active Twitter accounts are bots with built-in retweet and "mention" strategies that target specific groups.462 Mentioning another account's username in a tweet notifies the user and increases views.463 At the time of the study, that meant that as many as 48 million bots may be posing as humans on Twitter.464

According to Twitter Audit—a tool that determines how many fraudulent followers an account has-34 percent of CNN's 25 million Twitter followers⁴⁶⁵ and 42 percent of Fox News's nearly 9 million followers⁴⁶⁶ are fake. President Donald Trump has over 16 million fake followers—which is 41 percent of his total Twitter audience.467 Some indicators that an account is a bot may be similar or duplicated tweets, a large amount of tweets or tweets in rapid succession, and a profile URL that's different from the screen name.468 BotOrNot, another public tool that evaluates Twitter accounts, leverages more than one thousand features to determine if a user is human or a program. 469

Bots played a key role in spreading the bogus story that presidential candidate Hillary Clinton was running a child sex ring out of a D.C. pizza parlor.⁴⁷⁰ They also helped push the evidence-free theory that Seth Rich—a Democratic National Committee employee who was murdered on a D.C. street-died because of a connection to leaked Clinton campaign emails.471

Filippo Menczer, professor of informatics and computer science at Indiana University, studies how information spreads inorganically through automated bots. He said at a February conference at Harvard University that bots helped spread a fraudulent news story that three million immigrants voted illegally, as an explanation of why Clinton won the popular vote.⁴⁷² The bots mentioned President Donald Trump's Twitter handle hundreds of times in their campaign to spread the story. Trump then repeated the false statistic to congressional leaders as fact.⁴⁷³

David Lazer, professor of political science and computer and information science at Northeastern University, studied 22,000 Twitter users and concluded that 70 percent of the false information in the months before the election was spread by only 15 people of that batch-less than O.1 percent.⁴⁷⁴ Lazer told PEN America that this finding was 'not as shocking as it might initially seem, in the sense that a lot of behaviors online tend to be concentrated in the top few individuals. Most people never tweet about politics, and most that do tweet very little." Lazer also found that of the 22,000 accounts he reviewed, about 50 people (0.2 percent) accounted for 50 percent of New York Times stories being shared on Twitter.⁴⁷⁵

Lazer called the 15 users who shared fraudulent news "super-sharers," or "super-active people who give their account information to third parties so that they're tweeting almost constantly."476 His research shows that "on Twitter, fake news is shared by real people ... concentrated in a small set of websites and highly active users" who automatically share news from those sources.⁴⁷⁷ Those stories can then get amplified by bots, which try to get the attention of public figures, including Trump, through mentions.⁴⁷⁸

A January U.S. intelligence report confirmed that Russia had launched a social media strategy of employing paid social media users, or "trolls," to disrupt the American election system. 479 In September, a New York Times investigation revealed that Russian operatives created "fake Americans" on Twitter and Facebook to influence the election, using bots to disseminate propaganda and disinformation that would benefit Trump.480

"On Twitter, as on Facebook, Russian fingerprints are on hundreds or thousands of fake accounts that regularly posted anti-Clinton messages," said the paper.481 "Many were automated Twitter accounts, called bots, that sometimes fired off identical messages seconds apart—and in the exact alphabetical order of their made-up names, according to the [cybersecurity firm] FireEye researchers."⁴⁸² The group found that on Election Day, one group of Twitter bots sent out the hashtag #WarAgainstDemocrats more than 1,700 times.⁴⁸³

Shortly after the publication of the *Times* story, *Bloomberg* reported that Special Counsel Robert Mueller, who is looking into possible collusion between Russian operatives and the Trump campaign, was "zeroing in on how Russia spread fake and damaging information through social media and is seeking additional evidence from companies like Facebook and Twitter about what happened on their networks." 484 Both social media companies are also scheduled to appear before Congress for a hearing on Russia and the U.S. election in November. 485

Preventing Manipulation vs. Misinformation

While conspiracy theories took hold long before social media, bots can now spread this information much faster than human beings. Many people can't really tell if something comes via an automated account or a person—especially since Twitter does not require typical users to reveal their real identities. (There are many reasons that a person may need to speak anonymously on social media, as noted elsewhere in this report, ranging from protecting their personal safety if they are a member of an oppressed group, to shielding themselves from government scrutiny if they are a political dissident in an authoritarian country, to enabling whistleblowers.)

Twitter says that it is constantly scanning for accounts that appear to violate their user policies, typically by exhibiting spammy behavior. This includes the mass distribution of tweets as well as attempts to manipulate trending topics. ABO More recently, Twitter said it was also hunting for "malicious" accounts and information networks on its platform. ABO The company said that on average, its automated systems catch more than 3.2 million suspicious accounts per week and 450,000 suspicious log-ins per day. These users' visibility may be reduced while Twitter investigates.

"Much of this defensive work is done through machine learning and automated processes on our back end, and we have been able to significantly improve our automatic spam and bot-detection tools," the company said in a blog post.⁴⁸⁹

In a June 2017, the company said it was expanding its spam-detection team, adding resources, and building news tools to combat manipulation efforts that "undermine the core functionality" of the service.⁴⁹⁰ The update on security efforts was purposely vague:

It's important to note that in order to respond to this challenge efficiently and to ensure people cannot circumvent these safeguards, we're unable to share the details of these internal signals in our public API. While this means research conducted by third parties about the impact of bots on Twitter is often inaccurate and methodologically flawed, we must protect the future effectiveness of our work.⁴⁹¹

In September, however, Twitter provided more detail on ongoing efforts. The company said that it was working to block suspicious activity by better identifying the true origins of traffic, detecting multiple accounts created by a single entity, building models that would analyze telling activities like the frequency and timing of tweets, and excluding automated tweets from its Trending Topics calculations, among other actions. The company also described verification and appeal mechanisms for suspicious accounts to prove legitimacy and plans to create a media literacy program.⁴⁹²

Twitter's efforts are so far focused on activity that violates its terms of service, but it hasn't addressed the issue of false information being spread via its platform, including factually inaccurate tweets by Trump. Notably, Twitter amended its rules in December 2015 to prohibit "abusive behavior and hateful conduct," ⁴⁹³ and has since punished some users for content considered in violation of these standards. ⁴⁹⁴

In contrast to Facebook and Google, Twitter does not appear to be considering ways it could introduce fact-checking, or highlight the work of independent fact-checkers, on its platform. In September, the company said that it would work "with reporters and media organizations to ensure that Twitter's real-time capacity for dispelling untruths is built into the approach of newsrooms and established media outlets worldwide."

"We are looking at a sort of tradeoff between how much ... censorship you want to do on the platform, and how much you want to do to guarantee unbiased political conversation online, which should be a priority," Emilio Ferrara, a research assistant professor at the University of Southern California who studies Twitter, told *Mother Jones*. "Platforms like Twitter, Facebook, [and others] have an effect on information campaigns, have an effect on political beliefs, and have an effect on the news that people consume and are exposed to every day." "497

The Road Ahead: Promising Approaches and Challenges

Twitter's open platform makes it possible for users to independently respond to, and correct, information posted on the platform that they believe to be fraudulent. However, the use of bots to rapidly push out information—far faster than human users can—requires a more concerted response.

Make Suspected Bots More Visible: Twitter is already studying bot activity and has identified a number of characteristics to help identify them. Developing ways to flag suspected bots, in a way that is visible to all users on the platform, would help genuine Twitter users understand when they are looking at possible bot activity, and to evaluate the information they are seeing accordingly.

Point Users to Fact Checking and News Literacy Initiatives: Twitter should explore ways to highlight the work of fact checkers and to feature news literacy information on its platform, and should support these initiatives through funding and potential partnerships.



PROFESSIONAL JOURNALISTS

The Front Line Against Fraudulent News

Reporters and their editors play a key role in providing and disseminating reported and researched news across the internet and social media. Professional journalists use time-tested standards to be accurate, thorough, fair, unbiased, and as balanced as possible. These standards, summarized in the Society of Professional Journalists' code of ethics, encourage journalists to seek the truth and report it, minimize harm, act independently, and be accountable and transparent. 498 Many newsrooms have crafted their own detailed ethics codes, correction policies, and standards for reporting, but these codes don't differ widely. In virtually every news organization, policies that foster transparency and accountability ultimately aim to promote trust and credibility.

At a major news outlet, before a news story goes on air, online, or in a newspaper, it is almost always read by one or more editors to ensure that it stands up, is wellsourced and unbiased, and has no "holes." If the story isn't ready, it is returned with queries to the journalist who prepared it. In an age of lean-staffed, fast-paced digital journalism, however, there are fewer editors to review not only the story but also the professional journalist's tweets, Facebook posts, Snapchat stories, etc.—the kinds of communications that are often meant to direct news consumers to the longer reported and edited content carried by the outlet.

Today's journalists must engage more directly with readers, master greater digital, audio, and visual storytelling skills than ever, and possess the speed and stamina to keep up with constantly breaking developments in an accelerated and relentless news cycle. Additionally, at a time when there's an urgent demand for clarity and context beyond presenting many sides of a complex story, the line between the news reporter and the analyst or opinion writer has blurred-confusing audiences already challenged by a multitude of information sources and formats.

In general, professional reporters at established news organizations take extremely seriously their work to report facts, provide context, and produce work that is credible. Most aspire to be independent, fair, and accurate, but many increasingly are accused of being biased by partisan groups.499 Partisan media has thrived on the internet, and some of it lives by the same professional standards as the mainstream media. But much of it does not. Conventions including sourcing, fact-checking, editing, and corrections may not be considered operative in smaller, ideologically aligned news sites that do not claim or aspire to be the equivalent of The New York Times.

Despite often-invoked public disdain for the press, in times of real crisis, Americans turn to professional journalists and news outlets with proven track records to learn what's going on and what to do, whether it's a hurricane, foreign policy crisis, or terrorist attack. Journalists are not, as President Trump claims, "the enemy of the people."500 In fact, they work for the people as stand-ins, upholding the First Amendment and the public's right to know what their government representatives, agencies, and other institutions are doing. Yet journalists remain under attack. While to some degree they always have been, anti-journalism rhetoric has grown worse under a president who constantly challenges and delegitimizes the role of the press as a democratic institution. President Trump's hostility toward the media, alongside the proliferation of fraudulent news stories and misinformation published for ideology or profit, has undercut public trust in journalists and placed new pressures on the profession.⁵⁰¹

Poll⁵⁰² after poll⁵⁰³ shows an unprecedented level of distrust in American media. The Edelman Trust Barometer, an annual survey measuring the general population's trust in business, media, government, and non-governmental organizations,504 reported a widespread collapse of faith in the media in its 2017 report. "Media is now seen to be politicized, unable to meet its reporting obligations due to economic pressures, and following social media rather than creating the agenda," Richard Edelman wrote upon the release of the report. "Donald Trump circumvents mainstream media with his Twitter account, in this way seeming more genuine, approachable and responsive. Technology has allowed the creation of media echo chambers, so that a person can reinforce, rather than debate, viewpoints."505

President Trump has exacerbated the lack of public trust in media,506 but "it has been building slowly for decades, to the point that the conversation between the media and its readers is broken," says Kyle Pope, editor of Columbia Journalism Review.507 "Many Americans no longer think the press listens to or understands them, and they long ago started tuning us out. We became part of the establishment that had turned its back on them. These are our failings, and they need to be fixed."

Facing the Credibility Crisis

Journalists and news organizations know that they are in a credibility crisis and that the spread of false information is only exacerbating the problem. Some 72 percent of journalists think fraudulent news will continue to become a bigger issue and won't go away, according to a Muck Rack survey of journalists published in May 2017.508

Many media experts, newsroom executives, and journalists are trying to figure out how to regain the public's trust and help news consumers ferret out real news from fake. Media outlets are in nearly nonstop meetings and conferences with tech companies, academics, and each other to combat the erosion of trust, according to Claire Wardle, chief strategist for First Draft, a nonprofit that addresses trust challenges in the digital age.⁵⁰⁹

John Daniszewski, editor-at-large for standards at the Associated Press, says that at the AP, the fraudulent news crisis has opened up "a new area of activity where we're a bit on the offensive, trying to squelch incorrect or false reporting and debunk it... There's enough fraudulent news out there that it's having a corrosive and damaging effect on us."510 (In the interests of full disclosure, Mr. Daniszewski is married to PEN America's Chief Operating Officer Dru Menaker.)

At the same time, newsrooms are aware of the role they, too, have played in the current credibility crisis, by occasionally publishing news stories that have not been adequately vetted or sourced, and by issuing corrections that competitors or critics then point to as sloppy journalism in action—even though some mistakes are inevitable in the fast-paced work of daily journalism, and correction issuances have long been standard operating procedure in the news industry.

Following President Trump's inauguration in January, Time came under fire for a report by White House correspondent Zeke Miller, who stated that a bust of Martin Luther King Jr. had been removed from the Oval Office. Miller made the mistake of relying on unconfirmed information: He looked around the Oval Office and saw only a bust of Winston Churchill, leading him to draw his own conclusions—which some saw as influenced by bias and a presumption of bad faith toward Trump.511 Though Miller quickly issued a correction and publicly took responsibility for his mistake, acknowledging that he should have confirmed his assessment with a White House aide, the damage was done: The president and his aides paraded the error as an example of "deliberately false reporting." 512 The fact that Miller's mistake appeared to be unintentional and his apology genuine was a distinction that did not concern the Trump Administration. But it did concern Time editor-in-chief Nancy Gibbs, who defended Miller's journalistic integrity at the same time that she expressed regret for the error. "The President and White House aides have cited this mistake as an example of 'deliberately false reporting," Gibbs posted to Time's website. "It was no such thing."513

In another widely publicized misstep in June, the Associated Press committed a sourcing error after running a story that linked Dow Chemical CEO Andrew Liveris to EPA Administrator Scott Pruitt's decision to drop a ban on a harmful pesticide. "EPA chief met with Dow CEO before deciding on pesticide ban," read the AP headline, drawing from an EPA-provided schedule that listed the Liveris-Pruitt meeting. ⁵¹⁴ But when it was revealed that the meeting had been canceled, and that Pruitt never officially met with Liveris on the date in question, the AP followed up with a correction, according to its policies: "EPA says

Pruitt meeting with Dow Chemical head was canceled."515 Here again, the story was read by some to reinforce concerns about media bias against the Trump Administration. But John Daniszewski sees the AP's response to this error as the mark of a trustworthy newsroom. "Mistakes will happen occasionally in news gathering, with the best of intentions," says Daniszewski. "We correct them quickly and ungrudgingly, and set the record straight as soon as we can. And that's the mark of an honest news organization."516

Of the thousands of reports published every day, mistakes and corrections such as these remain a relative rarity. But at a time when some news consumers remain wary of establishment news organizations, partisan news outlets and activists are finding it far easier to enhance the visibility of—and in some cases blatantly distort—a news outlet's errors and missteps, no matter how big or small they may be.

Breitbart News in particular has engaged in this strategy, investigating and fact-checking mainstream news competitors and their journalists and attempting to uncover sloppiness with varying degrees of success. In May, Breitbart picked up the story of an Associated Press freelancer who, following President Trump's election, posted a call to protest on her Facebook wall, prompting Breitbart to accuse the AP of employing a "leftwing" activist.⁵¹⁸ The AP went on to bar the journalist from future political assignments, stating: "AP standards require employees to refrain from sharing political views in any public forum."⁵¹⁹

One month later, after Trump adviser Anthony Scaramucci disputed a CNN report alleging that he had ties to a Russian investment fund, Breitbart reporter Matthew Boyle launched his own investigation, exposing cracks in the claim.520 CNN retracted the story, stating that it "did not meet CNN's editorial standards."521 Network executives also asked for the resignation of three prominent CNN journalists involved in the report⁵²² (including the executive editor of an investigative reporting unit⁵²³), in one of the biggest shake-ups to stem in part from a partisan news outlet's allegations of poor journalistic standards against an established media organization. In October 2017, Breitbart was itself the subject of a BuzzFeed exposé drawing on a number of internal Breitbart documents that "clearly show that Breitbart does more than tolerate the most hate-filled, racist voices of the alt-right. It thrives on them, fueling and being fueled by some of the most toxic beliefs on the political spectrum—and clearing the way for them to enter the American mainstream."524

Some conservative activists have even gone undercover to try to catch the mainstream media in missteps. In one undercover video, activist James O'Keefe captured a CNN producer criticizing Kellyanne Conway's physical appearance. ⁵²⁵ In another, a video that received endorsements from President Trump and White House Press Secretary Sarah Huckabee Sanders, a CNN producer of health and medical stories suggested to one of O'Keefe's colleagues



CNN Atlanta Newsroom

that there might be no legitimacy in the ongoing Trump-Russia story.⁵²⁶ While these "gotcha" moments fall far short of proving fraudulent news making ("Diversity of personal opinion is what makes CNN strong," CNN said in response to O'Keefe's Trump-Russia video⁵²⁷), they do assist an ongoing campaign to paint the mainstream news media as unreliable and biased.

News organizations already have a number of processes in place to ensure fairness, maintain accountability, and mitigate fallout when a story containing false or misleading information gets published. After Anthony Scaramucci disputed the June CNN report tying him to a Russian investment fund,528 CNN executives were quick to launch an internal review to vet the disputed information, get to the heart of the issue, and offer a timely redaction. Before going to publication, CNN stories are filtered through what's known as "The Triad," in which a story is passed from CNN's fact-checkers to its standards team to its legal department, all to confirm that the reporting is fair and accurate and that it passes muster. 529 But for the Scaramucci story, this three-pronged approach broke down: CNN's legal department flagged concerns that were never addressed before publication. While CNN was quick to apologize for the mishap, it didn't specify what, if anything, in the story was untrue. 530 The network's lack of transparency generated confusion about the severity of the breach in protocol, leading some at the network to question why CNN felt it necessary to demand the resignations of the journalists involved—a measure that a number of CNN staff members and media commentators found "overly harsh," according to a September New York Times investigation of the incident.531

To add an extra layer of accountability beyond the ranking editors who oversee standards and ethics issues, some newsrooms, like NPR's,532 maintain an ombudsperson or public editor, whose job is to receive questions and concerns from the public, including complaints alleging that the news coverage is not fair or accurate. Traditionally there have been a few channels through which complaints can be lodged-e-mail, posted mail, telephone calls-though social media now allows critiques to be issued across a variety of platforms at any time. It's up to the ombudsperson to sift through the messages (which at major news outlets can range in the thousands to the tens of thousands on a weekly basis⁵³³) and respond, sometimes directly, sometimes via blog posts or weekly columns, with explanations or critiques about the reporting choices, journalist, or column in question.534 In one example of a public editor holding a news outlet accountable to a high level of journalistic integrity, former New York Times public editor Margaret Sullivan (now a media columnist at The Washington Post) criticized535 Times columnist Nicholas Kristof for failing to explain to readers why he'd championed Cambodian activist Somaly Mam, whose credibility was called into question by a Newsweek story. 536 When Kristof responded to Sullivan's charge in his column, writing about the matter in great depth ("I thought she was a hero," he wrote, "and, in fairness, so did lots of others"⁵³⁷), Sullivan still didn't let him off the hook. Speaking on behalf of the readers she was paid to represent, she asked if his response was "enough." "Some Times readers have told me that they don't think so," she wrote. "Both in tone and conclusions, Mr. Kristof certainly could have gone further."⁵³⁸ Where others may have put the issue to rest, Sullivan continued to push the conversation forward, taking seriously her role as a representative voice of the *Times*' audience. And in an interesting postscript that illustrates how complicated journalism can be, a subsequent *Marie Claire* story on Somaly Mam cast doubt on some of the reporting in the original *Newsweek* piece that challenged her credibility.⁵³⁹

What an ombudsperson chooses to address publicly may depend on the newsworthiness and severity of the issue in question: Messages focusing on hateful grievances stemming from preconceived prejudices are typically passed over in favor of messages containing legitimate comments on an article's accuracy, missing facts, or a columnist's point of view. Ultimately, the ombudsperson is not there to defend or apologize for the news outlet but rather to represent public interests, explain how journalism works, and hold the newsroom accountable for maintaining the highest standards of journalistic integrity.⁵⁴⁰

Public editor roles are on the wane across the United States, however.⁵⁴¹ Some news organizations have chosen to think differently about accountability, as *The New York Times* demonstrated this past May when it eliminated the public editor position, which it first established in 2003.⁵⁴² *Times* publisher Arthur Sulzberger Jr. argued that the role of public editor had become unnecessary, as "our followers on social media and our readers across the internet have come together to collectively serve as a modern watchdog, more vigilant and forceful than one person could ever be."⁵⁴³

Many people have criticized this decision, expressing skepticism of Sulzberger's argument that today's digital public square can effectively hold those in power accountable. As Margaret Sullivan, who had by then moved on to the Post, wrote in a tweet: "The one thing [a] public editor can almost always do is hold feet to the fire, and get a real answer out of management."544 Newsweek's Zach Schonfeld was more blunt, stating: "The Times's ability to hold the [Trump] administration accountable relies on its ability to convince readers that it's holding itself accountable-to convince the country that it's not 'fake news,' as Trump frequently charges, and that it is getting the story right."545 The scrapping of its public editor coincided with a more widespread reconfiguration of Times newsroom practices, as management decided that its multilayered setup of editors and copy editors "would be replaced by a single group of editors ... responsible for all aspects of an article."546 At a time when critics of the mainstream media continue to seize on any mistakes, this decision was seen in some quarters as removing rather than maintaining layers of accountability.

The Trump Administration, along with members of the partisan news media, have cited a number of other ways the mainstream media can't be trusted. Subjective reportorial and editorial judgment, corporate influence, and the blurring of reporting, advertising, and opinion have all been held up as evidence of news media bias in recent years.

A handful of studies⁵⁴⁷ have demonstrated that journalists are far more likely to identify as Democrats or independents, and one 2014 Indiana University poll found that only 7 percent of reporters identified as Republicans, down from a decade earlier.⁵⁴⁸ Though this particular poll represented journalists across the industry and not just political journalists,⁵⁴⁹ the data was used to discredit the mainstream news media by right-leaning political pundits like Fox News's Sean Hannity, who tweeted, "As if we needed any more evidence of media bias, a new study from Indiana University is extinguishing any doubts."550 Media analyst Joe Concha read the study in a different light, pointing to a trend he believed was more relevant to the debate. "The number that really stands out from the study is the rise in reporters identifying themselves as independent," Concha wrote. "Given the dark clouds hovering over both parties...it's not terribly surprising to find 50.2 percent of reporters identify themselves as neither a Democrat nor Republican." In Concha's opinion, conservative pundits like Hannity left out deeper context in their rush to attack the "liberal bias" in the news media, reducing the numbers to a political argument rather than inviting the complex analysis they deserved.⁵⁵¹

Accusations of bias aren't limited to reporters. The owners of news organizations have been taken to task as well, including left-leaning billionaire Warren Buffet, who owns more than 30 (mostly local) newspapers;⁵⁵² the Republican-leaning Smith family, owners of the broadcast TV giant Sinclair Broadcast Group;⁵⁵³ and the Democratic-candidate-supporting Jeff Bezos, founder of Amazon.com, who purchased *The Washington Post* for \$250 million in 2013.⁵⁵⁴

The Sinclair Broadcast Group, which has expanded drastically in recent years, has been criticized for infusing its network with a right-leaning perspective. The network requires its 173 stations to air certain news programs-including commentary from former Trump White House official Boris Epshteyn-that critics allege convey consistently conservative arguments on controversial political issues like voter ID laws and tax reform.555 (The number of Sinclair-owned stations is set to rise to 233 once the network finalizes its proposed \$3.9 billion acquisition of Tribune Media.556) In Seattle, a progressive city where Sinclair owns the KOMO broadcast station, some KOMO employees have expressed concern over news features like the "Question of the Day,"557 a daily poll they believe sometimes poses leading questions.⁵⁵⁸ The Smith family has also been historically supportive of Republican candidates.559



Journalists are far more likely to identify as Democrats or independents, and one 2014 Indiana University poll found that only 7 percent of reporters identified as Republicans, down from a decade earlier.

Jeff Bezos and The Washington Post have received similar scrutiny. Though he has been described as a libertarian,560 Bezos has donated money to several Democratic candidates over the years,⁵⁶¹ prompting concern that his political inclinations could hold sway over the Post. Following Bezos's purchase of the news outlet, Fortune magazine's senior editor-at-large (and former Post employee) Allan Sloane wrote, "No matter what Bezos says ... he's almost certain to begin imposing his standards and beliefs on the Post, or at least on its opinion pages."562 Critics have also been wary of how Bezos's corporate interests might affect the journalistic integrity of the Post.563 "Yes, Bezos bought The Washington Post with his own cash, not through Amazon. But that's the best way of merging the two," Cade Metz wrote in Wired following the 2013 purchase.564

During his campaign for president and after his election, Donald Trump has been another frequent critic of Bezos and the Post: He revoked the paper's credentials to cover his campaign events⁵⁶⁵ and accused Bezos of leveraging his news outlet to influence politicians.⁵⁶⁶ He also let loose on the corporate media in general: "Let's be clear on one thing," he said at a campaign rally. "The corporate media in our country is no longer involved in journalism. They are political special interest no different than any lobbyist or other financial entity with a total political agenda-and the agenda is not for you, it's for themselves."567

News outlets standing in the line of fire of these attacks have responded in a number of ways, with the intention of appearing more balanced than their detractors give them credit for. In April The New York Times-which ranks on the "Audience Is More Consistently Liberal" side of Pew's study of American media habits⁵⁶⁸—hired Bret Stephens, a conservative columnist. Stephens's first column drew outrage from some Times readers and led Business Insider to report on the "many" readers who chose to cancel their subscriptions⁵⁶⁹ in response to Stephens's assertion that climate change activists hyperbolized the issue by "claiming total certainty about the science." 570 Editorial page editor James Bennet defended his hiring of Stephens as an effort to bring a diversity of perspectives to the Times, writing that, "particularly during this turbulent and searching time in America and around the world, we should have the humility to recognize we may not be right about everything and the courage to test our own assumptions and arguments."571 Others saw the hire as a superficial gesture more reflective of the establishment media's short-sightedness than an earnest desire to bring a diversity of perspectives to its newsroom. "It takes a particular sort of insularity to hire a pro-war, anti-Trump white guy as a contribution to diversity on the NYT editorial page," climate blogger David Roberts wrote in Vox in May.⁵⁷² Kenneth Caldeira, a Carnegie Institution climate scientist, 573 was more concerned about what he saw as the columnist's flawed approach to crafting an argument. "Bret Stephens's opinion piece ... is attacking a straw man," Caldeira wrote in response to the column. "No working scientist claims 100% certainty about anything."574

Other news outlets have attempted to expand and deepen their coverage of non-urban and non-coastal parts of America, particularly in light of the soul-searching that ensued after the 2016 election, when news organizations and pollsters were forced to reconcile the reporting they'd done and the predictions they'd made with the election of the candidate that many had not foreseen winning.⁵⁷⁵ One Columbia Journalism Review article, titled "Drive-by journalism in Trumplandia," offered a piercing examination of the news media's post-election reflex to send journalists in droves to the parts of rural America seen as responsible for Trump's ascent. "While some stories have offered insight into these communities' affinity for a billionaire with authoritarian tendencies," the report stated, "much of the coverage feels like checking a box: We sent α reporter to explore the heart of American darkness. Such drive-by attempts signal that national media isn't grappling with its mistakes in any sustained way."576

In March, in a move that, depending on one's perspective, could be seen either as proof of or a direct challenge to the charge leveled in the CJR article above, the New York City-headquartered news group BuzzFeed hired an Ohio-based political reporter named Henry Gomez. Business Insider reported that BuzzFeed had specifically hired Gomez to explore the experiences of Trump voters and conservatives, and called Gomez's midwestern locale "a notable detail, as some news organizations have said they plan to look outside the Northeastern 'Acela corridor' for new hires in an effort to better represent Americans across the heartland."577 A similar line of thinking also led the Huffington Post to expand its digital magazine, Highline, to cover stories of people around the country "who have been left out of the conversation." 578 While these attempts by news organizations to shine a light on under-covered communities and perspectives are noteworthy, they've also generated controversy. "The narrative that attributes Trump's victory to a 'coalition of mostly blue-collar white and working-class voters' just doesn't square with the 2016 election data," Nicholas Carnes and Noam Lupu wrote in a June Washington Post analysis. In their estimation, Trump voters on the whole were more affluent than the phrase "working class" implied—a fact that few people were discussing. 579 Such post-election prioritization of stories about white working-class Trump voters raised other concerns, including a worry that such widespread coverage of this specific community would inevitably reduce important coverage of the challenges facing differently marginalized communities. As one CNN reporter wrote shortly after the election, "The economic anxiety facing black and brown workers, while arguably more profound, has been largely left out of the conversation."580

Attempts to source more stories from rural America don't necessarily address the larger geographical divide that's now a reality of the news industry. The national media is largely headquartered in wealthier cities along the East and West Coasts, while 73 percent of today's internet publishing jobs are clustered along either the Boston-New York-Washington line or the western corridor running from Seattle to San Diego to Phoenix. The media "bubble," in regards to geography, may be true.⁵⁸¹

The news media has also been accused, sometimes rightly, of blurring the line between opinion, advertising, and bona fide journalism. Reacting to the rapid rise of social media, news sites have come to offer brands a kind of sponsorship that gives them direct access to news consumers, a strategy known as "native advertising"—ads that take on the appearance of editorial content. Porbes chief product officer Lewis DVorkin, a former print journalist, was an early advocate of breaking down the divide between journalism and marketing. With the advent of social media, he wrote in 2010, "the media's three distinct voices—journalists, consumers and marketers—could openly roam about and publish within close proximity of each other, connecting, communicating and learning....

But DVorkin's vision of digital journalism as an Eden where journalists, marketers, and news consumers exist on a level playing field has yielded a different reality. A study by the Tow-Knight Center for Entrepreneurial Journalism found that 54 percent of news consumers have at some point been deceived by native advertising. 585 Journalist and blogging entrepreneur Andrew Sullivan has been particularly critical of the new advertorial landscape. "Advertising snuck into the editorial pages in a way that advertising has always wanted to do," Sullivan said in an interview with Digiday, which covers technology's role in

media and marketing. "It used to be an axiom that the job of journalists was to be resistant to that and sustain the clear distinction between advertising and journalism. One side has effectively surrendered." 586

Most print news organizations with a digital presence label the content on their platforms: news, opinion, paid sponsorship, etc., with varying degrees of visibility and clarity. In this way, news outlets can alert their readers to the fact that they're reading or viewing content that's been paid for by advertisers. (Though it's worth noting that on digital platforms, these labels aren't always effectively applied-a point that this report will explore in greater depth.) "TBrandStudio" appears at the top of The New York Times's sponsored-content pages, which the Times aggregates beneath the banner heading "From Our Advertisers" on its home page.587 The word "Advertisement" accompanies all paid content on Vice News's website.588 Similarly, the word "Opinions" helms The Washington Post's op-ed pages,589 while The Boston Globe's op-ed section breaks down opinion pieces into subcategories: editorials, letters, and ideas. 590 The Chicago Tribune quite simply labels news items "News." 591

Cable news outlets, by contrast, offer a more muddled mix of fact and opinion, where such labeling is harder to come by. For years, cable news networks have been airing hybridized talk programs that bring together a mix of reporters, hosts, and commentators in conversations that jump between news, analysis, and opinion without pausing to distinguish among the three or putting on-air labels on the screen to distinguish who is a journalist and who is an advocate. TV personalities like Sean Hannity will argue that they're talk show hosts, not reporters, and so deserve a different level of scrutiny than television journalists.⁵⁹² But Hannity's show contains elements similarly employed by television news anchors to report on current events, such as interviews with newsworthy figures, clips of breaking news items, and interactions with Fox News reporters about developing stories. In March Fox News legal analyst Andrew Napolitano came under criticism for blurring the line between news reporting and rumormongering during an episode of Fox and Friends. Napolitano announced that "three intelligence sources" had confirmed that President Obama had enlisted British agents to wiretap Trump Tower during the presidential campaign—an allegation President Trump already held to be true.⁵⁹³ ("I'd bet a good lawyer could make a great case out of the fact that President Obama was tapping my phones in October, just prior to Election!" President Trump tweeted out on March 4.594) Napolitano offered no evidence to back up his allegation, however, leading Fox News anchor Shepard Smith to state that the news network had no information to corroborate Napolitano's claim. British officials denied the charge. 595 According to Fox News's website, Napolitano "provides legal analysis" on the Fox News Channel and the Fox Business



Network.⁵⁹⁶ But on this episode of Fox and Friends he was not offering analysis, he was stating as news an unverified claim.

The co-opting of journalistic tactics for talk programming combined with the lack of distinction between news reporters and expert contributors can be difficult for audiences to parse. Pundits can bring diverse and valuable perspectives to news stories that deserve contextualization, but they can also dilute complex arguments, pose false choices between whether an issue "belongs" to the right or the left, and stray into irrelevant or hostile territory, leaving audiences to determine the value of such discourse. 597 Even networks and programs that try to produce clear, identifying graphics to accompany the conversation find that their efforts can crumble with the velocity of onair debate. 598 "The leading news networks-CNN, Fox, MSNBC-don't report the news as much as they talk and speculate endlessly about it," Paul Farhi wrote in The Washington Post in June 2016.⁵⁹⁹ He was responding to the nearly nonstop campaign coverage of Hillary Clinton and Donald Trump, which was causing news networks' ratings to soar after several years of decline.600

In an age when social media holds enormous value for news networks and journalists to promote their stories and make important professional connections, there has been an unnerving tendency on the part of some journalists to use their widespread public followings on Facebook and Twitter to share their personal political leanings and opinions. While they're obviously entitled to personal ideologies and beliefs, journalistic ethical conventions have long encouraged reporters to remain professionally neutral and skeptical in their service to the public. As former New York Times executive editor Bill Keller has said, "I think of it as reporters, as an occupational discipline, suspending their opinions and letting the evidence speak for itself."601

But the line blurs when a journalist is followed on social media by friends and strangers alike, prompting questions about who sees a journalist's posted messages: Friends and family members? Fans and readers? How social media is used across the news industry is still evolving, and will continue to evolve for years to come. But as newsrooms and journalists continue to defend against accusations of bias, it's important that they remain vigilant about social media practices and develop policies and standards around how social media is used by reporters, editors, and marketing teams. Professional journalists working for mainstream news outlets owe it to their audience to keep their biases in check and be open to and report on all points of view.

Labels, Headlines, and Verified Accounts: Tangible Steps to Combat Fraudulent News

While there are quite a few initiatives on which journalists and technologists are collaborating to conduct research and develop new tools, there are also simple efforts that news organizations can undertake to combat fraudulent news and push back against accusations of bias. These include making a concerted effort to better label every bit of published digital and print content. Andy Borowitz, who writes the Borowitz Report for The New Yorker, added a "Not the News" label to his pieces to ensure that no one confuses his satire with real news. 602 There are also methods of appending fact-check "tags" to articles to signal whether an item that pops up through a search engine has been checked for accuracy by one or more independent third-party fact-checkers.603 Twitter employs blue check marks to verify that accounts of public interest are held by authentic users, another kind of signposting.⁶⁰⁴ This sort of verification can be especially useful since automated bot accounts are being programmed to spread fraudulent news, particularly on Twitter, according to a July 2017 Indiana University study on how online information spreads. 605

While verification requirements may help battle automated bots that spread fraudulent news, they are not without problems of their own. There are many reasons that a person may need to speak anonymously on social media: from oppressed minorities abroad who are worried about being targeted by their governments to victims of domestic abuse, LGBTQ+ youth, or whistleblowers of all stripes.

A range of approaches will be needed to help news consumers easily differentiate between types of content. This is especially true since many consumers read news on smartphones, where it's more difficult to distinguish commentary, analysis, and hard news from one another than in, for example, a newspaper, where news is on the front page and opinion sits in the clearly titled op-ed section.

"If you look at how people consume news today, and the problems of confusing propaganda and news, these labels are actually more necessary than ever," wrote Tom Rosenstiel,606 executive director of the American Press Institute, in a December 2016 paper for the Brookings Institution entitled "What the post-Trump debate over journalism gets wrong." "Inside our mobile streams," he wrote, "as we click through related links, news stories and opinion stories are mixed. And on social platforms, all content is combined. Journalists need to help readers make these distinctions, not give up on them because they are not as clean cut as they once were." Clear and accurate labels could also help consumers regain trust in the mainstream news. In Rosenstiel's opinion, journalists and editors "should embed a label of 'News Story,' 'News Analysis,' or 'Opinion Piece' right into the content in such a way that it is evident when a piece is linked to on social media." 607

Another step that news organizations can take to regain public trust and push back against misinformation is to be vigilant on the accuracy of headlines. Mainstream news publications sometimes use "clickbait" headlines that are attention-grabbing in order to increase article views. Scott Kraft, deputy managing editor of The Los Angeles Times, is realistic about the importance of writing headlines that accurately reflect the information in an ensuing article, while also attracting a wide audience. "We want the biggest audiences we can have for our stories," says Kraft. "Obviously we have standards for writing headlines and what should be in there, that we shouldn't overpromise or take advantage of words that we know do well on a search." But headlines don't have to be bland, either. "They can be clever, they can use word play, they can do a number of things," says Kraft. "But they still have to reflect what's in the story, because if a person clicks on that headline and goes to the story, and the story doesn't say what [the headline] says, then we've lost a little credibility with that reader." "608"

Claire Wardle contends that "all newsrooms" are guilty of writing clickbait headlines, some of which can be misleading. "Usually the text is fine," Wardle says. "But headlines drive traffic. I don't think we've been honest with each other about what misleading headlines do to the news ecosystem."

The problem is exacerbated given the human tendency to see a sensational headline and instantly share it, often without reading the content. On April Fool's Day 2014, NPR posted an empty article with the headline "Why Doesn't America Read Anymore?" ⁶¹⁰ The goal of the experiment was to see if readers really did engage with articles beyond a headline. While there was no corresponding article to back up the headline, a number of "readers" issued passionate and defensive comments about the nonexistent article nonetheless. ⁶¹¹

The publication IFLScience.com conducted a similar social experiment last year to see how often a headline would be shared and retweeted. The attention-getting headline read: "Marijuana Contains 'Alien DNA' From Outside Of Our Solar System, NASA Confirms." The headline was bogus. It was shared over 167,000 times.

Both publications wanted to prove a point: People share and sometimes trust sensational headlines without reading the story. In explaining the reasoning behind its experiment, IFLScience.com referenced a Columbia University and France National Institute study by computer scientists that showed that up to 59 percent of links shared on Twitter were never clicked on, suggesting that people are more likely to share content than read it. 615

Critics complain that partisan groups that alter head-lines are creating another kind of fraudulent news. 616 For example, earlier this year, a conservative nonprofit changed a headline to take aim at a Virginia gubernatorial primary contender, Ed Gillespie, who was mentioned in a *The Washington Post* story about the debate over removing Confederate statues. The *Post* article, which was primarily about Gillespie's opponent, included Gillespie's stance that "he doesn't support moving statues but that such decisions are local issues." The conservative group Conservative Response Team, however, changed

the Post headline on Facebook to read "Gillespie: I'm OK with Charlottesville Taking Down the General Lee Monument." The Facebook post—with its new, misleading headline—was widely shared and viewed more than 400,000 times, and was removed only weeks later by Facebook (for violating its Terms of Use). Facebook has since restricted users' ability to edit headlines. 618

News organizations have always sought readers' attention through flashy headlines, but with today's journalism industry struggling to stay afloat, the pressure to attract eyeballs is particularly intense. Amy Webb, CEO of the Future Today Institute, has spent the past 15 years concerned about and working on the future of journalism. ⁶¹⁹ She believes that accurate headline writing is a simple fix that news organizations could employ to regain credibility. "I see 10 to 15 headlines a day that are misleading," Webb noted in a recent interview. "Everyone is looking for a switch to pull the plug on fake news or come up with some grand gesture. The first step, I think, is a small step. We have to get every news organization to agree to some standards on how to write their headlines."

New Initiatives: Building Credibility Through Greater Transparency

"Credibility really boils down to transparency," says Jane Elizabeth of the American Press Institute. According to Elizabeth, the more transparent you are about "how you do journalism, why you chose to write this story, the more people will understand. But we live in very divided society. I don't know how successful we can be, but we have to try." Elizabeth sees transparency as one of the three key elements of accountability journalism. The other two are providing context and using original named sources. 621

"Newsrooms need be more transparent about what they do and why," says Dan Gillmor, a media literacy professor at Arizona State University's journalism school. 22 "This involves explaining more about who journalists are and what their backgrounds and biases are. It involves explaining how—and especially why—they do what they do. It includes more engagement (a word I don't especially like) with the audience/community related to transparency. It involves using technology much better to achieve all of this."

The AP's John Daniszewski says transparency remains an important goal of his news organization. "In general we want to be transparent. In fact we have our statement of news values and principles on our publicly facing website, 623 and we're engaged in a project now to make it more accessible and more usable for the general public, so they can get to it faster and search it. I think in this environment, it has become more important for news organizations to speak about their values, and why what they do is important and trustworthy." 624

"It's very important for people to understand all that the media does when they report on a story," David Sanger



of The New York Times said at a Fortune-sponsored technology panel. "There's a lot of talk about the media using anonymous sources-the president calls them fake sources—but maybe the media doesn't do a good enough job of explaining to people what its processes are, how it tries to combat bias, how it tries to be fair to people. People don't get to see all the stories that get killed by editors because they don't have enough sources." 625

A variety of new projects are underway to help reporters and newsrooms boost their efforts to maximize transparency. To engage audiences and help journalists become more transparent, Hearken,626 a journalism consulting platform, is working on a new tool, Open Notebook, 627 for getting audience input before a story is published. Julia Haslanger, an engagement consultant at Hearken, told the Harvard-affiliated Nieman Lab that the idea, inspired by the updates that Kickstarter projects send their backers, is a cross between "a mini-newsletter, a live blog, and a place to store files in public."628

Hearken, the Nieman Lab report added, "is modeling the idea on the efforts of organizations like ProPublica and The New York Times, which recently have made efforts to both publicly verify breaking news stories in real-time and involve readers in the reporting process."629 Haslanger said that radical transparency in reporting can help to address the credibility problem. "Journalists continually need to earn trust," she said. "I don't think earning trust is something you do once and just bank on for a long time."630

As one example of transparent reporting, 631 Haslanger noted how The Washington Post's David Farenthold used Twitter to ask his followers for help reporting on Donald Trump's charitable giving, then continued to keep them updated on Twitter before publication in the Post. Another example, this time of an entire news organization's attempt at accountability and transparency, was a May 2017 New York Times video showing viewers exactly how the paper verified the chemical attack in Syria. 632 A third example was The Washington Post's July 2017 behindthe-scenes explanation of how it reported its story on Washington, D.C., school suspensions.⁶³³

Sally Lehrman, who heads the Trust Project at Santa Clara University, agrees that the media sometimes does a poor job of explaining how it works to its audience. 634 The Trust Project seeks to use technology to help readers separate trustworthy journalism from questionable sites to reinforce credibility. 635 Lehrman is working with some 70 news organizations in the United States and abroad-including The New York Times, The Washington Post, Mother Jones, Mic, and Vox as well as with Google, the American Press Institute, Facebook, and Poynter. 636 Lehrman has also formed the News Leadership Council, which guides the Trust Project "on core issues related to information literacy and rebuilding trust in journalism within a fractious, so-called post-fact environment."637 This group includes editors from The Washington Post, Financial Times, and The Wall Street Journal and executives from Google, Facebook, Gizmodo Media Group, Hearst Television, and marketing and diversity advocacy organizations.638

Lehrman says that she and Richard Gingras, Google's vice president of news, came up with the idea for the Trust Project⁶³⁹ in 2014, after a number of Silicon Valley residents expressed a desire to explore ways for editors to use technology to support quality journalism instead of seeing technology as a barrier, as they believed too many editors did.640 According to Lehrman, they started interviewing readers to find out what they value in news: when they trust it and when the trust is broken. The first meeting was in 2015 with news executives in the United States and abroad.

"Some members of the public are frustrated with journalism that seems thin, uninformed, biased against their community, and replete with argument, anger, and violence," Lehrman wrote in The Atlantic in May 2017.641 "They complain about opinion presented exactly like news. Some people are so fed up that they have simply disengaged."642 A news story, people told them, "should offer tools like annotation and forms that would allow readers to contest claims, suggest more sources and propose ideas for reporting further. Journalists, people urged, should be more collaborative with the public they aim to serve."643

Lehrman, Gringas, and partners came up with a list of 37 "trust indicators" that they believed would enhance transparency.⁶⁴⁴ Soon they were whittled down to eight core trust indicators and their attributes, including information about the news outlet's ownership and the expertise of its journalists.⁶⁴⁵ Other trust indicators include: Does the outlet link to credible sources; have an ethics and corrections policy; have a commitment to diverse voices; and clearly label if an article is news, sponsored content, opinion, or something else?646

"The idea," Lehrman says, "is that you would open up your phone or you're looking at your computer screen, and you would see, along with the news story that you are looking at, signals or indicators of where did this come from. Is it a piece of news? Is it analysis? Is it opinion? Is it satire? You could also click on the author byline and find information about that producer or author. Then, tied to these bits of information that the public could see, we would provide signals back to the news distribution platforms that their algorithms can read. It essentially is an affirmative signal, as opposed to [a] fake news negative signal."647

The Trust Project has commitments from Google, Facebook, Twitter, and Microsoft's search engine Bing to surface links from news organizations that have fulfilled trust indicators more prominently in their news feeds and search results.⁶⁴⁸ Readers would see clear visual icons

"Using a combination of the author's digital identity, the current date and time, and the digital content itself, an algorithm computes a unique block of data that functions like a digital notary stamp," Susan McGregor.

demonstrating which trust indicators apply—a kind of nutritional label for news.

"We have a lot of signals that let us understand that WαPo"—The Washington Post—"is quite a different source from a blog that sprang up 10 days ago," Gingras says. 649 Technology companies and the public, he adds, "share the same objectives: We don't like being scammed/spammed." 650

Claire Wardle's First Draft, also backed by Google, launched in 2015⁶⁵¹ to help journalists verify social media content, particularly photos and videos, and pull together resources for gathering, verifying, and creating stories from user-generated content.⁶⁵² In February, First Draft (also known online as First Draft News) teamed up with Google News Lab, Facebook, and 37 French news outlets to fact-check the 2017 French presidential election. 653 Called CrossCheck, this collaborative journalism verification project was designed to "help the public make sense of what and who to trust in their social media feeds, web searches, and general online news consumption," in the words of its inaugural press release.654 "We debunked 65 stories, got 550 questions from the audience, had 180,000 fans on Facebook, and all this happened in 10 weeks," Wardle said after the French election. 655 "We learned an enormous amount from this project."

Another idea for improving the credibility of existing content is to technologically create a kind of verified digital signature. "Using a combination of the author's digital identity, the current date and time, and the digital content itself, an algorithm computes a unique block of data that functions like a digital notary stamp," Susan McGregor, an assistant director at the Tow Center for Digital Journalism, wrote in CJR. 556 "Such digital signatures are how your computer or phone identifies 'trusted developers' when you download a program or app; they are the same 'signatures' provided by encrypted email software."

Then there's the \$14 million News Integrity Initiative, 657 launched in April 2017 with money from nine funders, including Facebook, the Mozilla Foundation, and the Ford Foundation. 658 The CUNY Graduate School of Journalism is administering the initiative, which involves research, projects, and discussions dedicated to finding ways to better listen to the public, according to Jeff Jarvis, the director of the Tow-Knight Center for Entrepreneurial Journalism at CUNY. In early October 2017, it awarded a total of \$1.8 million to 10 projects focused on building

trust between newsrooms and the public, improving diversity in newsrooms, and decreasing polarization in public conversations.⁶⁵⁹

Addressing the potential problem of an all-powerful entity that decides which content should and shouldn't get published, Jarvis wrote in a post on Medium, "I do not want to see single arbiters of trust, quality, authority, or credibility—not the platforms, not journalistic organizations, not any self-appointed judge—nor single lists of the good and bad. I do want to see more metadata about sources of information so that everyone in the media ecosystem—from creator to advertiser to platform to citizen—can make better, more informed decisions about credibility."660

As part of this initiative, Jarvis wrote, CUNY, Storyful, and Moat⁶⁶¹ are collaborating to help advertisers and social media platforms avoid supporting fraudulent news by creating an Open Brand Safety database to track websites and video URLs that they've identified as creating intentional misinformation. Rather than flagging false news articles, it will flag sites that publish false news articles, protecting companies that don't want their ads to appear on such sites and starving them of ad revenue. "The Storyful-Moat partnership, called the Open Brand Safety framework, first attacks the low-hanging and rotten fruit: the sites that are known to produce the worst fraud, hate, and propaganda," Jarvis wrote. 662 Storyful—a division of Rupert Murdoch's News Corp-verifies social content that makes news,663 while Moat evaluates the effective reach of online ads.664

Jimmy Wales, who founded Wikipedia, announced in April that he was forming WikiTribune, a crowd-funded news platform, to fight fraudulent news.665 WikiTribune envisions itself as a neutral news site that hires professional journalists to research and report news along with citizen volunteers.666 Wales wants to combine the Wiki concept of letting the community control everything with guidance from pros.667 "You need to have some professional journalists on staff who can do the things that it's too hard to do from home, and yet you shouldn't discount the value that a great community can bring in terms of fact-checking, overseeing things, working on neutrality, and even doing some original reporting, when they're well-suited to do it," Wales told Nieman Lab. WikiTribune will cover general news, particularly politics, at first, said Wales.668 According to its website, it will be ad-free and community



funded (as of October 2017, there were over 11,000 supporters).⁶⁶⁹ News will be evidence-based and documented, and sources will be transparent.670

Not everyone is optimistic about the project. Adrienne LaFrance, who writes on media and other topics for The Atlantic, criticized WikiTribune as "too ambitious" to work with a staff of only 10. "It's tempting to imagine a new kind of journalism site that tidily solves so many of the industry's problems—a site that's indifferent to the shrinking pool of available ad dollars, that gets people to carefully vet the information they encounter on a massive scale, a site that inspires people to spend their money on quality journalism, and a site that consistently produces it," she wrote. "This is ambitious stuff. Maybe too ambitious. After all, for WikiTribune to accomplish its goals, people will have to agree to both pay for the service and build it themselves—with most of them doing that work for free."671

The Road Ahead: Promising Approaches and Challenges

Even the most venerated journalism institutions could benefit from taking certain steps toward increasing their own accountability, in order to generate deeper trust among the public and to help readers distinguish between real news stories and false or slanted information.

Maximize Transparency: Many news consumers, young people as well as adults, may be unfamiliar with the practices of newsrooms and journalists. News organizations can signal accountability and help assuage distrust around reporting practices and editorial decisions by ensuring that their websites provide easily accessible information outlining their standards, practices, and policies-including how they address errors, provide adequate fact-checking, and make use of a public editor or ombudsperson. (Since public editor roles are on the decline, news organizations might also wish to explain their reasons for not making use of this position.) Newsrooms might also benefit from offering readers a window into the news-making process, posting behind-the-scenes videos, or publishing step-by-step guides that elucidate how the work gets done, from pitches to fact-checking to publication to issuing corrections.

Newsrooms can also become more transparent about how they hold reporters and editors accountable. Journalists' bios, which can be linked to from article bylines, should attest to credentials and areas of expertise. If journalists are being unfairly targeted as purveyors of fraudulent news, the news organizations that employ them should offer public and transparent support. If reporters have a significant public presence and cover contentious political and other issues, editors should monitor their adherence to the outlets' standards policies, especially concerning the airing of personal opinion on social media.

Improve Accessibility and Engagement: We live in

an era in which consumers wield more influence than ever before. Social media has elevated consumer voices, often with positive outcomes that improve corporate accountability and empower communities. Applied to newsrooms and news consumers, organizations that open a more direct line of communication between audiences and journalists could go a long way in establishing trust among audiences and enhancing newsrooms' accountability. News consumers who feel that their voices and experiences aren't represented in the news they read, or that certain news outlets demonstrate biases in their reporting, could find redress in newsrooms that regularly solicit audience input, ask readers for real-time verification of breaking news, and crowd-source ideas for stories, sources, and leads.

Improve Labeling of Content and Graphics: Whether deliberately or not, news outlets are not always judicious in how they choose to label and present content. A news item should be visually discernible from opinion, analysis, sponsored content, and paid advertisements. Graphic labeling that is bold and consistent would go a long way in establishing concise visual cues that alert audiences to the genre of the content they're engaged with. Newsrooms should also take measures to embed labels in such a way that when content is linked to on social media, its label will be immediately visible in the thumbnail.

Address Misleading Headlines: Even the most judicious newsrooms aren't immune to a clickbait economy that traffics in headlines. But headlines that fail to deliver on the content they promise risk alienating readers and sowing greater distrust and suspicion of media biases. Newsrooms that establish (and are transparent about) their own headline-writing standards could go a long way toward drawing in readers and gaining their trust.

Increase Collaboration Among New Initiatives: As this section describes, there are a variety of promising multi-stakeholder initiatives under way to combat fraudulent news and increase public trust in the media. These initiatives offer a mix of research and proposed ways forward, through community engagement, content labeling, and transparency initiatives. From the CUNY-administered News Integrity Initiative, to the crowd-sourced WikiTribune, to the transparency-focused Trust Project, these new entities are spearheading a collaborative, innovative, and tech-friendly approach to combatting fraudulent news.

Having already embraced a collaborative ethos, these initiatives should coordinate with one another to ensure that their work is not duplicative. But overall, these new projects will require not only institutional support but also societal buy-in to thrive. Organizations concerned about the spread of fraudulent news should assist in building up these new initiatives, to favor a more proactive approach to both false news and the more long-term work of rebuilding trust in the media.

FACT-CHECKING

In March 2017, a website called Newslo claimed that at a CNN town hall, then-U.S. Secretary of Health and Human Services Tom Price took a question from a cancer survivor who asked why the GOP wanted to cut the Medicaid expansion that saved his life and kept him from bankruptcy.⁶⁷² "At the end of the day, it's better for our national budget if cancer patients pass away more quickly," Price supposedly replied. "It's a lousy way to live anyway, and I'm sorry to say it out loud, but it's the truth."⁶⁷³

The quote later appeared on the websites USPOLN⁶⁷⁴ and Politicops.⁶⁷⁵ Only one problem: The quote was fraudulent. While Price did talk to a cancer survivor at a CNN town hall,⁶⁷⁶ he never said that it would help if cancer patients died quickly, according to a transcript of the event.⁶⁷⁷

Newslo bills itself as a "news/satire" hybrid, with the tagline "Just Enough News."⁶⁷⁸ The site takes true political stories as a jumping-off point, then turns to satire to make them more absurd. "What makes Newslo.com-related stories especially confusing is that they use a small piece of real news or quotes by real people and build fraudulent stories around them," according to PolitiFact, a fact-checking project that started in 2007.⁶⁷⁹ "They feature a pair of buttons that allow readers to highlight the true parts of their stories, so readers can conceivably know the difference." But if someone shares the story "on other sites, without the buttons, there's no way to know."⁶⁸⁰

Independent fact-checking organizations jumped on the eye-popping quote: Snopes⁶⁸¹ debunked the Price claim and posted a video explanation on Facebook⁶⁸² a day after it appeared. PolitiFact weighed in on March 21, rating it "Pants on Fire."⁶⁸³ FactCheck.org dismissed it as false on March 23⁶⁸⁴—a week after it appeared. Facebook users even flagged the post as potentially fraudulent news.⁶⁸⁵ Yet the story ended up being shared on Facebook more than 75,000 times.⁶⁸⁶

"Some stories you get to the third paragraph, and clearly the stuff is so ridiculous or supposed to be satire," Lori Robertson, managing editor of FactCheck.org told PEN America. "Clearly people are not reading these articles past the headlines. Some stories are trying to be a little more tricky. But a lot of them, if you go to the 'about us' page, a lot of them are upfront and say they are news satire." 688

Fact-checking in the age of 24-hour news cycles has spurred growing legions of independent checkers. The majority of fact-checking sites focus on politics, with the notable exception of Snopes, which was founded in 1994 to investigate urban legends and includes general interest and politics. FactCheck.org, the first political site, started in 2003 when founder Brooks Jackson, a former CNN correspondent, began exploring politicians' tortured relationship with the truth. At CNN, Jackson "pioneered the 'adwatch' and 'factcheck' device for debunking false

and misleading political statements, starting with the presidential election of 1992," according to FactCheck.org.⁶⁹²

Jackson joined the Annenberg Public Policy Center in 2003 and started FactCheck.org⁶⁹³ after tiring of readers cluttering his inbox with political spam and chain letters, the old-fashioned version of fraudulent news. 694 He once received an email that claimed that members of Congress don't pay social security but receive fat pensions at taxpayer expense. 695 "How many people can YOU send this to?" urged the email. "Keep this going clear up thru the 2004 election!! We need to be heard."696 There was no truth to it. So Jackson wrote a blog post in 2004 titled "What to do when your friend's email lies to you." 697 "This cyber-sickness should stop," he presciently typed. "All it takes is a little bit of common sense and skepticism, some curiosity and a few keystrokes. Nailing these lies can even be fun."698 His blog post could be considered the first how-to guide for exposing false online information.

Fact-Checking Enterprises Have Grown Dramatically

As of October 2017, there were 43 active fact-checking outfits in the United States at the state, national, and local levels, according to the Reporters' Lab at Duke University, which studies new forms of journalism.⁶⁹⁹ Some are affiliated with news organizations, others with NGOs and civic watchdogs. "Most of the fact-checking operations in the U.S are projects of news media organizations," Mark Stencel of the Reporters' Lab told PEN America.⁷⁰⁰ "That is not the case outside the U.S., where the work is done by a mix of media companies, standalone start-ups and nonprofits, journalism projects based at universities, and watchdog groups that are focused in some way on government accountability."⁷⁰¹

Worldwide, the number of active fact-checking projects has increased dramatically, from 44 active fact-checking organizations in 2014⁷⁰² to 126 in 49 countries as of October 2017, according to the Reporters' Lab. There are now independent fact-checking organizations on every continent except Antarctica.⁷⁰³

"Now that our work is so well-known and an established form of journalism, governments and political actors are calling themselves fact-checkers, using our approach to produce propaganda," Bill Adair, director of the Reporters' Lab, said in a speech at Global Fact 4 in Spain⁷⁰⁴ that was attended by about 190 fact-checkers from 54 countries.⁷⁰⁵ "We need to speak out against this and make sure people know that government propagandists are not fact-checkers."⁷⁰⁶

An independent fact-checking organization includes most of the following attributes, according to the Reporters' Lab:⁷⁰⁷ It "examines all parties and sides; examines discrete claims and reaches conclusions; tracks political promises; is transparent about sources and methods; discloses funding/affiliations; and...its primary mission is news and information."⁷⁰⁸

The growth in independent, nonpartisan fact-checkers



Some stories you get to the third paragraph, and clearly the stuff is so ridiculous or supposed to be satire," Lori Robertson, managing editor of FactCheck.org told PEN America. "Clearly people are not reading these articles past the headlines.

spiked during the long presidential election season. At one point, there were 52 U.S. fact-checkers verifying Donald Trump's and Hillary Clinton's remarks,⁷⁰⁹ though some shuttered after the election. "Fact-checking has become a well-established part of campaign journalism," Adair wrote in The New York Times, citing an October 2016 Pew Research Center survey, which found that 83 percent of voters believe fact-checking is a responsibility of the

Today a number of daily news organizations, including The Washington Post, the Associated Press and NPR, have in-house fact-checking operations tasked with assessing the accuracy of statements by public officials, media outlets, and other information in the public interest.711 In January, the BBC set up a team to debunk false news.712 The New York Times hired a dedicated fact-checker this year.⁷¹³ AP has launched a weekly feature, "Not Real News: A look at what didn't happen this week," that debunks false news and is distributed to its clients.⁷¹⁴ Other news organizations, including CNN and NBC, fact-check heavily during elections—when falsehoods are most prevalent—and sporadically at other times, such as during presidential speeches and other major televised events, said Adair of the Duke Reporters' Lab.715

The American Press Institute is leading a project to increase and improve the practice of fact-checking and accountability journalism.⁷¹⁶ "The grant-funded project supports research to improve political fact-checking, and works with news organizations to significantly increase and improve accountability journalism practices as well as contribute to public debates on the topic," its website states.717 Its website offers resources for fact-checkers, including a link⁷¹⁸ to the "Verification Handbook," edited by Craig Silverman, BuzzFeed's media editor.⁷¹⁹ The PDF-format handbook has tips on verifying photos, videos, and user-generated content, especially when it appears during a crisis.

How Fact-Checkers Operate

Most fact-checkers are journalists.720 Fact-checkers begin researching claims by combing the web, reading old speeches, making phone calls, looking at data, checking photos, and talking with experts or staff to parse fact from fiction.⁷²¹ For example, PolitiFact looked into a story on the now-defunct website FreedomCrossroads.us that claimed House Minority Leader Nancy Pelosi suffered a psychotic breakdown on June 14, 2017 and had been "transferred via ambulance to Bethesda," showing an image of an ambulance with its loading doors open.722 PolitiFact noted that the image used on the site came from year-old NBC footage of a March 2016 shooting at the Capitol. 723 They also checked to see who owned FreedomCrossroads.us and found that the owner was a self-described liberal troll from Maine who liked to trick conservatives with absurd stories to show their gullibility.⁷²⁴ Of course, as PolitiFact also noted, anyone on the FreedomCrossroads website could have scrolled to the bottom, where they would have noticed a message stating, ""Here we gather a boatload of bullhonkey, works of pure satirical fiction, to give the fist-shakers of the world a reason to hate."725

PolitiFact, which won a Pulitzer Prize in 2009726 for its groundbreaking work during the 2008 election, is operated by editors and reporters from the Tampa Bay Times, an independent Florida newspaper owned by the nonprofit Poynter Institute for Media Studies.⁷²⁷ It gets some funding from Poynter, grants and individual donations⁷²⁸ as well as from TV syndication, app sales, and fees from state affiliates,729 which are run by local news organizations that partner with the Tampa Bay Times and concentrate on local facts.730 As of October 2017, there were 18 state PolitiFacts,731 though Bill Adair notes that "the number of active partners has declined since the election, which is a pattern we typically see."732 State PolitiFacts often share costs with local news outlets. For example, PolitiFact Georgia partners with The Atlanta Journal-Constitution.733 PolitiFact Texas works with three print affiliates: the Austin American-Statesman, the Houston Chronicle, and the San Antonio Express-News.734

The Washington Post's Fact Checker column is seven years old.735 It has three staffers, one hired in April for video fact checks. (For comparison, FactCheck.org has eight employees⁷³⁶ and four undergraduate fellows⁷³⁷; Snopes has 16 full-time employees, including a six-person support staff;738 and PolitiFact lists 18 staffers.739) "Traffic is soaring," said Glenn Kessler,740 who inaugurated Fact Checker.⁷⁴¹ "January was our biggest month ever. And so far this year, we are running about 150 percent higher than last year."742 Kessler noted that from July 2015 to July 2016, unique visits to the newspaper's Fact Checker blog increased 477 percent.⁷⁴³ In Trump's first 232 days, the Post's Tracker determined that President Trump made 1,145 false or misleading claims.⁷⁴⁴

While the demand for help determining what's true, partly true, or flat-out false is robust, some question the usefulness for the amount of effort. The structure is some question the usefulness for the amount of effort. The structure is structured in the structured in the structure is structured in the struct

Time is the biggest obstacle working against even industrious fact-checkers. No matter how quickly an independent fact-checker works, it's rarely going to be simultaneous with the misinformation or lie. "It's a lot faster to publish a falsehood or a lie," said Alexios Mantzarlis, director of Poynter's International Fact-Checking Network. "You don't need to research a lie. You need to research a fact-check extensively."

Jestin Coler, an admitted creator of fraudulent-news sites, knows this firsthand. To During the 2016 presidential campaign, he made a lot of money inventing stories that got wide distribution, including one bogus story for his flagship website, National Report, To about how customers in Colorado marijuana shops were using food stamps to buy pot. Coler questions whether fact-checking is effective given the delay. These stories are like flash grenades, he told The Guardian in May. They go off and explode for a day. If you're three days late on a fact check, you already missed the boat.

In many cases, conscientious news consumers who are in doubt have to proactively research whether a claim is true. During the Ebola crisis and at the height of the Obamacare debate, Andrew Guess at Columbia University looked at 100,000 tweets on the two topics and found that on Twitter, misinformation outpaced efforts to correct it by a ratio of about three to one.⁷⁵⁵ After a few weeks, incorrect and corrective tweets became more equal in number, according to the study.⁷⁵⁶

PolitiFact's Adair believes that fact checks need be done as soon as possible to be effective.⁷⁵⁷ "The moment someone says something, it would be great to have an instant fact-check," he said.⁷⁵⁸ "That's possible since politicians are creatures of habit and repeat the same lines. We have to figure out how to detect a statement and match it in a fast way."⁷⁵⁹

In June, Full Fact, an independent fact-checking nonprofit in the U.K., received \$500,000 from the Omidyar Network and the Open Society Foundations to build two automated fact-checking tools. ⁷⁶⁰ In October, the organization plans to debut its new software, which will automatically alert journalists to false claims made in the media and in Parliament in

real time.⁷⁶¹ According to *The Guardian*, the software "scans statements as they are made by politicians and instantly provides a verdict on their veracity. An early version relies on a database of several thousand annual fact-checks, but later versions will automatically access official data to inform the verdict."⁷⁶²

"It's like trying to build an immune system," Mevan Babakar, a project manager for Full Fact in London, told *The Guardian*. With the goal of becoming progressively more effective at fighting the disease of misinformation, the software will track millions of words on live news programs, broadcasts of Parliament, and newspaper articles "until it identifies a claim that appears to match a fact-check already in its database," *The Guardian* reported. Babakar said the goal is not to be conclusive but to provide the "best available evidence." 765

Other experimental efforts to use machine learning and automation for fact-checking are underway, but most of these still depend to some extent on careful human analysis by those familiar with the news, as the software may flag a fact check that isn't relevant and cause more problems than it's trying to solve.⁷⁶⁶ "I'm skeptical we'll see anytime soon a fully automated solution, not in the next decade or two," said Poynter's Mantzarlis.⁷⁶⁷ But "parts of the fact-checking process might be speeded up. If someone says unemployment is going up or crime down—that a machine could learn, and that would free up time for the more complicated stuff."⁷⁶⁸

Fact-Checking in a Hyper-Partisan Era

In a deeply polarized political climate, fact-checking itself is regarded skeptically by some, especially those on the right who argue that it is unfairly critical of Republicans and too lenient toward Democrats. A June 2017 report from the Duke Reporters' Lab confirmed that liberals like fact-checking; conservatives don't. ⁷⁶⁹ It also found that during the 2016 election, popular conservative websites were far more likely to criticize, ridicule, or dismiss fact-checking outlets than their liberal counterparts. ⁷⁷⁰ The report, which studied five liberal and five conservative American media outlets, highlights the need to figure out how to reach audiences that are skeptical of fact-checking.

Independent fact-checking organizations say that they are committed to being nonpartisan. But since a lot of claims that they check come from the right, there is a perception that they lean left. "In my experience, fact-checkers are desperate to be nonpartisan," said Dartmouth University professor Brendan Nyhan, who studies fact-checking.⁷⁷¹ "But that doesn't mean they should create artificial balance when reality is asymmetrical.... Hillary made plenty of misstatements. But Trump said many more false statements. The fake news that was produced was overwhelmingly pro-Trump."

Suspicions about the political leanings of independent fact-checking groups could perhaps be allayed if these organizations were more transparent about how they work.



"The resistance to paying attention to anything outside of the conservative bubble is intense. You definitely cannot say this is false and then link to The Washington Post Fact Checker or Snopes." If you do, Sykes said, conservatives will reject these sources as "liberal" and "biased."

Independent, nonpartisan fact checkers are, overall, transparent about where their money comes from and about documenting their research. FactCheck.org is funded by the Annenberg Foundation, the Flora Family Foundation, the Stanton Foundation, individual contributions, and Facebook, which paid \$52,283 toward a "project to help identify and label viral fake news stories flagged by readers on the social media network."773 Snopes says that it is independently funded through advertising⁷⁷⁴ (though in July 2017 it launched a reader-donation drive to stay afloat through a contractual dispute that has cut the site off from its source of advertising income).775

But, says Jane Elizabeth of the American Press Institute, fact-checkers "need to be more transparent about how and why they pick the topics they do."776 Snopes has a link to its "methodology" but doesn't explain how it decides which facts to check.⁷⁷⁷ Fact-checkers often react to the news cycle and events, such as speeches and political conventions, and scour their Twitter and Facebook pages for questions. Since 2007, FactCheck.org has run a feature allowing readers to "Ask FactCheck," to respond to reader inquiries, most of which are about viral emails and social media memes.⁷⁷⁸ The organization also scours Sunday talk shows, TV ads, C-SPAN, presidential remarks, congressional transcripts, campaign statements, and press releases for claims by top officials.⁷⁷⁹ PolitiFact, in addition to accepting suggestions from readers, analyzes speeches, news, press releases, campaign brochures, TV ads, Facebook posts, and interview transcripts. "Because we can't possibly check all claims, we select the most newsworthy and significant ones," the website says in explaining its process. The Washington Post responds to misinformation in the daily news and relies on reader questions. About 50 percent of its fact checks start with a reader inquiry.780

Tim Graham of the politically conservative Media Research Center laments that there are no conservative-leaning fact-checking sites, though his site does some fact-checking.⁷⁸¹ "These fact-checking organizations have been founded and funded by mainstream media, with all the same blind spots and biases," said Graham.⁷⁸² "Then the Jill Abramsons of the world," he adds, referencing an op-ed in The Guardian⁷⁸³ by the former executive editor of The New York Times, "use them to say, 'See, Hillary Clinton is an honest person.' Preposterous. So for Facebook to use them [to partner with them] is inherently nerve-racking."784

Graham's perception may not be entirely accurate. Fact-checking groups, including Snopes and FactCheck.org, do exist independently of mainstream news organizations, and the conservative publication The Weekly Standard has a fact-checking section,785 with which Facebook recently announced a partnership.⁷⁸⁶ However, his views are illustrative of the conservative distrust of fact-checking, as measured in the Duke Reporters' Lab report.787

"There's no question Republicans are resistant to fact-checking," said Charlie Sykes, a former top-rated conservative talk show host who for more than two decades was a major force in Wisconsin politics.⁷⁸⁸ "You have falsehoods and fake stories, and you try to push back on people and say, 'This is wrong,' but the resistance to paying attention to anything outside of the conservative bubble is intense. You definitely cannot say this is false and then link to The Washington Post Fact Checker or Snopes." If you do, he said, conservatives will reject these sources as "liberal" and "biased."789

In December 2016, Matt Shapiro, co-founder of the Paradox Project, a blog for political "misfits," 790 produced an analysis that concluded that PolitiFact's fact-checks are biased against conservatives.⁷⁹¹ According to Shapiro, Politi-Fact frequently rates GOP-sourced statements that are largely true as "mostly false," which it justifies "by focusing on sentence alterations, simple mis-statements, fact-checking the wrong fact, and even taking a statement, rewording it, and fact-checking the re-worded statement instead of the original quoted statement."792 In another analysis, Shapiro accused PolitiFact of stacking the deck against Republican politicians by running numerous checks on similar statements.⁷⁹³ For example, Trump's claim that he did not support the Iraq war-uttered in different ways and settings-was reviewed by PolitiFact at least six times. Each time the statement was graded "mostly false" or "false"—and each mark registered against Trump on his PolitiFact scorecard. 794 By comparison, questionable statements by Clinton were checked once, twice, or not at all, Shapiro argued.795

Sykes lays much of the blame for the right's distrust of fact-checkers on a specific PolitiFact incident.⁷⁹⁶ In 2008, the organization declared "true" then-candidate Barack Obama's statement that, under his proposed Affordable Care Act, "if you like your health care plan, you can keep it." In 2009, PolitiFact adjusted its rating to "half true," citing additional details included in the bill. 1998 It repeated the same classification in 2012. 1999

As the Affordable Care Act was being rolled out in the fall of 2013, some health insurance companies sent out letters to approximately four million Americans canceling plans because they didn't meet the law's coverage requirements.⁸⁰⁰ By December, PolitiFact had dubbed Obama's claim the "Lie of the Year" for 2013.⁸⁰¹

"I do think PolitiFact bore some responsibility for conservatives losing trust in fact-checking," Sykes told PEN America. Box "Their ratings on Obamacare provided cover for the administration to help pass the bill," which "was deeply disturbing to conservatives. Box The Wall Street Journal is equally critical of PolitiFact, saying the fact checker, in effect, "helped bless" Obamacare and "pretends to be even-handed but has its own biases.

The Rising Problem of Left-Leaning False News

Although both sides of the political aisle bear some responsibility for promoting false news, ⁸⁰⁵ a Stanford University study found that during the election, pro-Trump fraudulent stories were shared far more frequently than pro-Clinton ones. The researchers cited 115 pro-Trump fraudulent stories that were shared on Facebook 30 million times, compared with 41 pro-Clinton fraudulent stories shared 7.6 million times. ⁸⁰⁶ They found that during the election, "fake news was both widely shared and heavily tilted in favor of Donald Trump" and that "Democrats are overall more likely to correctly identify true versus false articles." ⁸⁰⁷ The Stanford study relied on "web browsing data, a 1,200-person post-election online survey, and a database of 156 election-related news stories that were categorized as false by leading fact-checking websites in the three months before the election."

Liberals are also susceptible to fraudulent news, however. In the left-leaning *New Republic*, Sarah Jones noted the popularity of Twitter personalities like Louise Mensch, a former Conservative member of the British Parliament, who tweets unverified, often false information about Trump officials. In what Jones called a "disturbing emerging trend," she wrote: "Liberals desperate to believe the right conspiracy will take down Donald Trump promote their own purveyors of fake news." sho

This fits a pattern wherein political biases on either side undermine factual accuracy. As the Stanford report noted, when a Democrat is in the White House, Republicans are more likely to believe negative or bogus news about the president. When a Republican is president, Democrats are more likely to believe negative or bogus stories. "In general, humans are really good at ignoring information that cuts against their ideological preferences," Lucas Graves, the author of Deciding What's True: The Rise of Political Fact-Checking in American Journalism, 1912 told NPR. 1913 "That's true on the left

and the right. It's true for more-educated as well as less-educated people. That's always been the case."814

And there aren't any easy solutions. "The partisan divide on the news media—not just fact-checking—is the result of decades of criticism and attacks," Bill Adair said. "It won't be corrected overnight. I think we need to reach out to audiences that resist fact-checking and find out why. We need to explore how they get their political information, what information they trust, and then consider adapting how we present fact-checking so it will get a broader audience." Bis of the result of t

Social science researchers have found that debunking or correcting misinformation can be more easily heard if it comes from a like-minded person or website. Be People tend to share and believe information from someone they know, making the messenger as critical as the message. Adam Berinsky, a professor of political science at the Massachusetts Institute of Technology, found that misinformation was most effectively refuted by an "unlikely source, someone whose interests would be better served if the rumor were true." So partisan misinformation that skews favorably to the right is better contradicted by a conservative politician than by a nonpartisan group such as FactCheck.org. "The key to this is the conservatives," said Sykes. There needs to be some sort of trusted fact check for the right. Who that would be? I don't know."

For its part, PolitiFact is engaging in outreach events in some red states like Oklahoma, in an effort to spread the word about what they do and explain it to skeptics. Their tactics include "leafleting, Facebook and newspaper ad buys, and event planning in three different states." **BED It is too early to tell what impact their efforts will have, but it is a novel approach that could be replicated if it shows promising results.

Improving How Fact Checks Are Presented

Another challenge is that fact-checking can be counterproductive. When debunking false information, the factchecker usually repeats it, giving it more currency.821 For instance, "the online Washington Post regularly features 'Fact Checker' headlines consisting of claims to be evaluated, with a 'Pinocchio Test' appearing at the end of the accompanying story," Matthew A. Baum and David Lazer wrote in the Los Angeles Times.822 "The problem is that readers are more likely to notice and remember the claim than the conclusion." Repeating the same rumors that the fact-check is trying to correct may only reinforce and amplify those claims, according to Berinsky's research.823 Hearing something again makes it more likely to stick. "People just remember hearing things," Berinsky told Northeastern University. "They don't always remember whether those things were true or false."824 But, as Poynter points out, there is a growing body of research suggesting the "backfire effect" of fact-checking a false claim is "a very rare phenomenon."825 In fact, a new study at the University of Western Australia concluded that more detailed corrections (at least three to four sentences) were



more effective, and that repetition of the correction could counteract regression to believing the myth.826

Some social science researchers advocate having fact-checkers debunk claims without repeating them. The conundrum is that news organizations and others want to get people's attention, and repeating the claim in the headline often does so. Additionally, fact-checking the specific claim itself makes things clearer for the reader. So editors encourage titles such as "Did Tom Price Say It Is 'Better for Our Budget If Cancer Patients Die More Quickly?" 7827 rather than, say, "A Fact-Check on Tom Price's Statement on Cancer Patients."

Another proposed improvement is to make fact checks more graphically appealing and engaging. Currently, they are often text-laden, with links and bullet points but few visual images to catch the attention. That's changing. The Washington Post now occasionally uses video. One such video explored statements by Trump and former FBI director James Comey that contradicted each other.828 It got more than 350,000 views on Facebook, Kessler told PEN America.829 "I think this one caught fire because it's easier to understand the dispute when you see the two men speaking past each other," said Kessler. "Makes more of an impact than words on a screen."830

BuzzFeed uses a videographer to debunk erroneous information, said media editor Craig Silverman.831 "Since a lot of stuff spreads on Facebook that's a photo or video, our feeling is the more effective way to counter this stuff is in the form of an image or video," he said.832 "That video appealed to someone, and that's why they shared it. It's logical to mimic that format. The other reason is Facebook, as a whole, is a very visual medium. When you look at what performs best, it's videos and memes."833

As technology gets more sophisticated at manipulating images and videos, fact-checkers need new tools to verify or debunk them. "The pace at which the media moves does not lend itself to careful forensic analysis of images," Hany Farid, a computer science professor at Dartmouth College, said in a RadioLab story about altering the audio in videos.834 Farid added that it currently takes a half-day or more to analyze an image to determine its authenticity.835

Worse, because advances in audio and video technology benefit those seeking to misinform as well as those trying to correct the record, they're "going to raise the fake news thing to a whole new level," said Farid. "The ability of technology to manipulate and alter reality is growing at a breakneck speed. And the ability to disseminate that information is phenomenal. I can't stop that, by the way. At the end of the day, it's always going to be easier to create a fake than to detect a fake."836

Jonathan Klein, former president of CNN/U.S. and former executive vice president of CBS News, has had to deal with multiple examples of technology changing the media. In July 2017, he was shown a beta version of software that allows users to alter recorded speeches, literally putting words in someone's mouth. "There's so many ways to abuse this," he told RadioLab.837 "It blows your mind." Klein continued: "It's terrifying. It hurtles us even faster toward to that point where no one believes anything. How do you have a democracy in a country where people can't trust anything that they see or read anymore?"838

The Road Ahead: Promising Approaches and Challenges

There's a popular saying: "A lie can travel halfway around the world while the truth is still putting on its shoes." Fact-checkers need better footwear, in the form of new technologies, greater resources, and innovative ways to spread fact checks in a manner that can compete with the replicability, speed, and viral nature of fraudulent news.

Build Credibility Through Transparency: Fact-checking initiatives have not fully broken through the cognitive gridlock of partisan politics. While there are no easy solutions here, fact-checking organizations should continue to hold themselves to a high standard of transparency and strive to find ways to make their work more transparent. Fact-checking organizations should be encouraged to clearly communicate with the public their methodology for picking stories to debunk and their own processes for avoiding political bias in their focuses. Much as reputable news outlets issue public retractions for incorrect articles, fact-checking organizations may wish to have a similar process for publicly acknowledging when they have mislabeled a story.

Forge New Partnerships: Local news outlets can be valued partners in bolstering the credibility of fact-checking initiatives, as they may be seen by some as more trustworthy than national newspapers or television news channels. Local newspapers, television stations, and others should strengthen-or start-their own fact-checking initiatives or partner with fact-checking organizations. News outlets and commentators across the political spectrum should also ask themselves how they can promote a respect for fact-checking as part of the important work of creating a civic consensus that values truth.

Support the Expansion of Fact-Checking Initiatives: Funders and development organizations should examine how they can play a role in bringing more and better resources to fact-checking initiatives, helping them to scale up their work, check more stories and do so faster, and develop new tools for fact-checking.

Keep Pace with New Technologies: The development of tools that can alter audio and video footage poses grave risks to fact-checkers' efforts to prove what is true and what is false. More resources, and innovative approaches, will be needed to develop tools to detect when a recording has been altered, and to demonstrate this in a convincing manner.

(A final note: The "lie can travel halfway around the world" saying is most commonly attributed to Mark Twain. The fact-checking site Quote Investigator, among others, explains that he almost certainly did not say it.839)

NEWS LITERACY

Before the digital age, news organizations acted as information gatekeepers, deciding what was and wasn't news and transmitting it to the public. With far fewer news outlets than are now available online, and with those traditional outlets staffed largely by seasoned, professional journalists, the public generally felt more comfortable relying on the information provided by the media than it does today. While the idea of a golden age of trustworthy, objective media may be a myth, the high point of American trust in media, according to Gallup polls, was in 1976, a dramatically different era, when 72 percent of those polled said that they trusted the media a "great deal" or a "fair amount."

Today, the internet presents users with a trove of limitless information. Anyone, anywhere, can generate new content, including breaking news stories—as indeed many "citizen journalists" have done effectively by documenting events of public interest (for example, incidents of excessive use of force by police⁸⁴¹) and posting the documentation online. But the openness of the internet also presents new challenges, as users must assume the roles previously played by newsroom personnel: deciding what qualifies as news, putting an item of information in proper context, and fact-checking and verifying sources.

Many Americans lack the news literacy skills required to distinguish between fact and fiction and to resist being duped by predatory actors motivated solely by profit or ideology. News literacy can be defined as teaching consumers of news to read it with a healthy skepticism, applying journalistic skills to verify the information in front of them.⁸⁴²

The need for better news literacy spans generations. While today's youth are digital natives who type, text, and tweet fluently, studies show that they still fall prey to false news sites and lack the skills to evaluate the steady flow of information aimed at them via social media. Many media experts, academics, teachers, and researchers believe that news literacy should become a component of curricula at all levels 44—ideally beginning in middle school or earlier.

In January 2017 Common Sense Media, a nonprofit that focuses on how kids navigate media and technology, surveyed 853 racially diverse children between ages 10 and 18 to find out how the most media-exposed generation processes news. 845 The survey indicated that only 44 percent of kids feel that they can distinguish real news from news that is intentionally wrong or inaccurate. Thirty-one percent said that they had shared a news story online that they later learned was inaccurate. 846

"Kids also often are fooled by fake news," the survey report said. "This may be why many are extremely skeptical and distrustful of the news media." ⁸⁴⁷ The survey also showed that children tend to trust news and information that comes from people they know and respect. Sixty-six percent trusted information from family "a lot," followed by teachers and other

adults (48 percent), news organizations (25 percent), and friends (17 percent.)⁸⁴⁸ They reported getting much of their news online from social platforms, preferring Facebook, then YouTube.⁸⁴⁹ Few were familiar with the need to vet sources: Thirty-one percent said they pay "very little" or "no" attention to the source of the news content.⁸⁵⁰ Another study, conducted in 2015 by the Media Insight Project, surveyed 1,045 young adults ages 18 to 34 and found that some 88 percent of these millennials regularly got news from Facebook and 83 percent from YouTube.⁸⁵¹

These findings reinforce the need for digital literacy skills. Common Sense's survey report concluded: "In a decentralized news environment with so many ways to get and share news, the ability to evaluate the quality, credibility, and validity of different sources will be increasingly valuable and necessary.... Children need help to filter out misinformation and to understand whether, when, and how news is biased." This help, they argue, must come from parents, educators, policy makers, researchers, and news organizations.

A Stanford study conducted in 2015 and 2016 of 7,804 students from middle school through college provides further illustration of the difficulties that young people have distinguishing between opinion, news, hoaxes, sponsored content, and ads. ⁸⁵³ The study included students from both underserved and well-off communities as well as online surveys at six universities. Some 82 percent of middle schoolers could not tell the difference between the examples on the following page—one a news story and the other a piece of sponsored content, essentially paid advertising that is formatted to look similar to news. ⁸⁵⁴

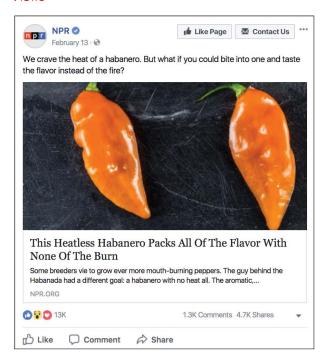
Teachers across the nation recognize the need to improve news literacy among students and are increasingly incorporating lesson plans in their curricula to do so. 855 The lead author of the Stanford study, Dr. Sam Wineburg, told *The Wall Street Journal* in 2016 that their free social studies curriculum, teaching how to judge the trustworthiness of historical sources, had been downloaded 3.5 million times. 856

Both the News Literacy Project and the Center for News Literacy at Stony Brook University also offer digital teaching tools for teachers. The News Literacy Project (NLP) is the brainchild of Alan Miller, a Pulitzer Prize-winning former reporter for the Los Angeles Times. Miller got interested in the topic after visiting his daughter's middle school in Bethesda, Maryland, in 2006 to talk about his job. It struck him that journalists could make an impact by sharing their experiences—especially since many Americans are unfamiliar with how journalists work.⁸⁵⁷

He founded NLP out of his basement in 2008 and began working with teachers in middle and high school in a few cities. 858 NLP teaches students not only how to evaluate content for authenticity but also to be mindful of sourcing and accuracy when they post online. 859 "It's a critically important skill to know how to discern and create credible information," Miller told PEN America. "Remember students, whether texting, blogging, or posting on Facebook, are part



News



of the conversation. How do they participate in a way that is credible and responsible and empowers their voices? It's the sharing that is causing so much of the spread of viral rumors, conspiracy theories, and hoaxes. We are teaching them to be skeptical about what they see and read and hear and to question whether they should believe it, share it, or act on it."860

The link between discerning credible information and creating credible information is an important one: News literacy courses can teach children not only how to evaluate the sources they read but also how to credibly research and write their own arguments, and how to make responsible, informed choices about what information to share with their own social networks. Such programs can help reinforce a message that high schools and colleges stress: Conduct your own research and analysis while avoiding plagiarism.

What News Literacy Teaches

News literacy classes are designed to teach students critical-thinking skills: to be skeptical but not cynical, said Miller.861 Students are taught how journalism differs from advertising, sponsored content, opinion, hoaxes, and conspiracies. They are encouraged to confront their own biases and understand how those biases might affect their news perception. They are instructed to read beyond the headlines, since there can be a disparity between a clickbait headline and the story itself.862

They also learn about journalistic principles such as fairness, balance, accuracy, ethics, and the protections of the First Amendment. They are reminded to slow down when reading,

Sponsored Content



Examples used in study of students' ability to distinguish between news and advertisements

pay attention to dates, note possible red flags such as frequent misspellings, check URLs, and read the "about" section of the website an article is from. Often, classes include real-life examples to illustrate efforts to fool or mislead readers.863

News literacy courses aren't intended to give students a list of reliable news sources or to single out other sources as untrustworthy. They are designed to equip students with the tools to decide that for themselves. Since NLP began, it has seen tremendous growth and received national media attention.864 In its first eight years, it reached more than 25,000 students.865 In an effort to reach a broader range, NLP developed an online news literacy resource, the checkology® virtual classroom, which it launched in May 2016.866 "If we are going to see news literacy embedded in the American educational experience," said Peter Adams, NLP's senior vice president for educational programs, "e-learning is the way we'd have to go."867

The Checkology platform features real journalists and other experts narrating a lesson, then gives students a chance to test themselves. In one lesson, NBC News correspondent Tracie Potts tells students that the first question to ask is "What is the purpose of this information?"868 Is it to entertain, inform, persuade, or sell? Students are shown a series of videos and news stories and asked to answer the purpose for each. This teaches them that there is a vast array of information online with very different goals. Then the correct answers are explained.

Teachers have shown consistent interest in the NLP's news literacy tools, with interest increasing dramatically following

After teaching thousands of college students, Howard Schneider has concluded that news literacy programs should target students before they reach high school or college.

the 2016 election.⁸⁶⁹ "This is a fraught time for educators to talk about democracy and civics because of the current climate," Miller said.⁸⁷⁰ "We understand how important it is to teach what news and information to trust and act on. Teachers are searching for a way that's safe, effective, and nonpartisan. That puts us in a position to meet this burgeoning demand."⁸⁷¹

By October 2017, more than 8,500 educators had registered for Checkology in all 50 U.S. states and 65 other countries, potentially reaching more than 1.28 million students, Miller told PEN America. The are not able to track the actual reach, though we're working on this, Miller said. But thousands of teachers are using the platform with hundreds of thousands of students.

Christian Armstrong, a former student at Leo Catholic High School in Chicago, is one such student. Armstrong grew up disconnected from the news, thinking it was all negative and had nothing to do with him. Then he took a news literacy course in high school. "This class has definitely changed my life," said Armstrong, according to an article that Miller wrote for the Catalogue of Philanthropy. Students from the class, Armstrong said, "prize news literacy over all else. The newspaper is considered to be our Holy Grail." He began reading the *Chicago Tribune* and corresponding with one of its columnists via Twitter. Brain the student at Leo Catholic High School Responding with one of its columnists via Twitter.

At the college level, Howard Schneider, dean of the journalism school at Stony Brook University, is one of the pioneers in the news literacy field. A former editor of Newsday, he created the first news literacy class in 2005 and began teaching it at Stony Brook's journalism school. ⁸⁷⁵ Gradually, Schneider realized that "it was not sufficient for us to simply train the next generation of journalists," he told Columbia Journalism Review. "We had to train the next generation of news consumers, too." ⁸⁷⁶ Since the program began, over 10,000 undergraduates across the university have taken the literacy courses, as well as almost 7,000 students at 18 other universities in the United States and 11 other countries. ⁸⁷⁷

News Literacy Classes are Effective—But They Need to Reach More People

Studies of the impact of news literacy education show that it is effective, although more research needs to be done to determine its long-term impact and which skills it is best at imparting to students.⁸⁷⁸ A study published in May 2016 analyzed survey data, comparing Stony Brook students who had taken the three-credit news literacy course with those who hadn't.⁸⁷⁹ The study found that "those who had taken a news

literacy course had significantly higher levels of news media literacy, greater knowledge of current events, and higher motivation to consume news, compared with students who had not taken the course."880 Researchers also found that "the effect of taking the course did not diminish over time."881

In 2012, Harvard's Joan Shorenstein Center on the Press, Politics and Public Policy documented the positive impact of the Stony Brook course while also noting that it appeared to be more successful at increasing students' engagement with news media and appreciation for the role of the press than at improving their ability to "spot flaws in news reports." Meanwhile, de-Americanized for implementation abroad, the Stony Brook course has experienced reported success in Hong Kong, Vietnam, and Myanmar—three nations with drastically different press freedom environments from the United States but where news literacy educators nonetheless have reported "positive" outcomes "because of the emphasis on developing critical thinking skills about information." 883

Other studies of news literacy courses have also reported positive results: A study of University of Maryland students who took a news literacy class found that the course "increased their ability to comprehend, evaluate, and analyze media messages in print, video, and audio formats as compared to the control group."884 A 2012 study of California high schoolers published in the International Journal of Communication found that digital media literacy education "is associated with increased online political engagement and increased exposure to diverse perspectives."885 News literacy education folded into more generalized "media literacy" training has also proven successful in helping students parse fact from fiction. Joseph Kahne, the lead author of the California high school study, co-authored a more recent report⁸⁸⁶ that investigated media literacy and democracy in our highly partisan era. Using data from a national survey of young people ages 15 to 27, Kahne found that media literacy training made people significantly less likely to believe a factually inaccurate claim, even if that claim aligned with their political views.887

Kahne's findings are encouraging, given the political polarizations currently entrenched among America's news consumers, and could offer a glimmer of hope to experts who despair of news literacy programs ever cutting through the noise of our current digital era. 888 Stanford's Sam Wineburg argues that taking a news literacy class or two isn't enough and that news literacy education must adapt wholesale to the current moment. "We are in a freaking revolution," Wineburg has pointed out. "We bank differently. We date differently. We



shop differently. We choose a Chinese restaurant differently. We do our research differently. We figure out what plumber to come to our house differently. But school is stuck in the past. What we need to do is ... think hard about what the school curriculum really needs to look like in an age when we come to know the world through a screen."889

Taking these considerations into account, news literacy courses are a potentially powerful tool in fighting the spread of misinformation online and equipping young people to be savvy and healthily skeptical news consumers. While there are a variety of online resources available for interested educators, librarians, and others in public service, they represent a piecemeal effort to solve a national problem. In addition to NLP's Checkology, Stony Brook now offers a Digital Resource Center, with lessons, videos, and curricula, that teachers at all levels across the United States are free to use.890 The university created a six-week, free college-level class on Coursera with the University of Hong Kong, available with Chinese and Spanish subtitles.891 Other institutions have also joined the effort to create resources for teachers and make them available for free. The New York Times began offering a news literacy curriculum in April that includes a quick game and scavenger hunt.892 The Newseum in Washington, D.C., a popular field trip destination, offers free 50-minute on-site labs, called Fighting Fake News: How to Outsmart Trolls and Troublemakers, that are tailored for students from seventh grade to college.893

After teaching thousands of college students, Howard Schneider has concluded that news literacy programs should target students before they reach high school or college. The long-term solution is to teach news literacy to every 12-yearold before they leave middle school, he said.894 "They are just emerging and beginning to think about the greater world," Schneider said.895 "They've had some experience with the internet and social media. But haven't been overwhelmed. The moonshot for me is to inoculate all the 12-year-olds in America [against misinformation]. That would be a huge step forward long term on dealing with these issues, which are not going to go away."896

Some teachers are taking the initiative to introduce news literacy skills at a young age. Scott Bedley, of Irvine, California, teaches his fifth graders not to take everything at face value.897 He was thrown for a loop when one student thought that Columbus crossed the Atlantic in 1972; he had Googled the information. "I was determined to change the way I help students critically analyze the information they were finding on the internet," Bedley said in an article for Vox.898 He now teaches his students to check the date of the article to see how current it is, to verify the information by going to other web pages to double check, and to look into the expertise and background of the author.

"The challenge for my students comes back to understanding the difference between someone who is sharing their opinion and someone who is creating news that is meant to mislead, either as clickbait or to influence those who don't take the time to verify accuracy," Bedley wrote. "We talk about how facts can be verified, whereas opinions typically can be supported with evidence, but are far more debatable."899

Funders have a key opportunity to support news literacy initiatives and enable them to scale up their work to reach more people. Funders can also provide crucial support to help news literacy experts develop new tools for a broader range of ages, both younger and older than the high school and college-aged groups that existing programs tend to focus on.

Many adults are as ill-equipped to navigate the digital information era as kids. Adults too are often confused by false news, according to a December 2016 Pew Research Center study.900 Almost one in four adults admitted to sharing fabricated news, both knowingly and unknowingly.901

"Right now, you have young people who have grown up with the internet and had no instructions because the adults in charge didn't know," Jane Elizabeth, senior manager of American Press Institute's Accountability Journalism Program, said.902 "They've had no one teaching them how to judge information. The gullibility gap will continue until this generation of learners is caught up by teachers so they come into the workforce prepared." 903

Local and university librarians play a key role in news literacy efforts, especially for adults. "Librarians can play a vital role in helping everyone, of any age, become critical and reflective news consumers," journalist Marcus Banks wrote in American Libraries magazine. "One positive outcome of the current furor about fake news may be that information literacy, for media and other types of content, will finally be recognized as a central skill of the digital age."904 Initiatives are already under way at some libraries. The Dallas Public Library and The Dallas Morning News teamed up in 2016 to offer workshops teaching research and journalism skills to high school students.905 A Knight Foundation-funded partnership between the American Library Association and the Center for News Literacy at Stony Brook University 906 won a \$50,000 grant to develop an adult literacy program at five public libraries that will be chosen through a competitive bid process.907

News literacy training doesn't have to take the form of an instructional class. American University students created an online Tinder-like game, Factitious, to develop a taste for truth seeking by creating scenarios in which players swipe left and right to determine whether news is fraudulent.908 The Washington, D.C.-based digital agency ISL built Fake News: The Game and has introduced it as an app and a traveling arcade game in some bars. 909 Amanda Warner, a learning designer, created the game Fake It To Make It to show how easy it is to make a fraudulent-news site. 910 The fact-checking site PolitiFact has also created a game, PolitiTruth.911

"The games share roughly the same setup of presenting a player with a headline, article, or claim and asking them to guess its truthfulness," according to Nieman Lab. "None of the items are made up-they're all published online somewhere,

"The fake-news phenomenon has made the time right for news literacy," Schneider told PEN America. "We need political and funding momentum. This is worthy of a major investment. This problem is not going to go away."

either a website known for promoting fake news or an actual news organization's site." 912

Efforts to Require States to Teach News Literacy Skills

State legislators are getting into the act, too. Through the advocacy of Media Literacy Now (MLN), which advocates for schools to incorporate media literacy programs, there were recently 19 media literacy-related bills moving through 10 state legislatures across the country. Five bills passed this year, while two died after legislatures adjourned, according to MLN.913 (News literacy refers specifically to the news business, while media literacy is a broader term that includes the ability to access, analyze, evaluate, and create media in various forms.)914 "The concept of media literacy is not widely known, and we see it as a solution," Erin McNeill, president and founder of MLN, told PEN America.915 "It's taught sporadically. There are a lot of educators who see the need and are trying to get media literacy in some form, whether in English, social studies, art, or civics. But they need help. They need resources. The media landscape is changing so fast that everybody is out of their depth. It's been bottom up at this point. If we could bring in some top-down solutions, we can help to reach more students. So we are going state by state as opposed to school by school."916

According to McNeill, Florida and Ohio "led the pack" in terms of early action to address media literacy in legislation, while Washington is leading on taking action from legislation through implementation. Connecticut, New Mexico, Rhode Island, Utah, New Jersey, Illinois and New Mexico have all taken some sort of legislative action on media literacy with MLN's direction.

In Washington state, legislators, librarians, educators, and media literacy advocates banded together to pass bipartisan legislation requiring schools to teach media literacy and internet safety. The new law calls for a statewide survey of educators to determine what is currently taught on these subjects, to inform any new policy that addresses what students should know "before they read or write an article on the web." About a dozen other states are using Washington state as a model, according to Kavitha Cardoza, a special correspondent for Education Week.

Illinois's civics requirement, added in 2015, was the first time in a decade that the state required an additional course for graduation, according to the *Chicago Tribune*.⁹²¹ "What is written into the course requirement is discussion of current

and controversial issues," Shawn Healy of the Illinois Civic Mission Coalition⁹²² explained to PEN America. Within this requirement is a framework "where students ask questions on the front end and evaluate sources, including news. We think that inquiry arc overlays with news literacy." Healy added, "The course requirement took effect last fall, so incoming freshmen will have completed one course of civics over high school."⁹²³

The goal is for all 50 states to pass media or news literacy legislation, McNeill of Media Literacy Now told PEN America. But, she said, there is no way to track their implementation. 924

With 50.7 million students in public elementary and secondary schools, 925 teaching news literacy skills to a majority of those students is a tall order and will require financial investments as well as statewide commitments. "The people working in news literacy are doing great work, but it doesn't scale," Dan Gillmor told PEN America. 226 "We have an emergency now and have to figure out how can we make this scale. The first place it should it scale is in the news organizations. They should have made news literacy a core part of their mission."

Now is the time, said Schneider of Stony Brook. "The fake-news phenomenon has made the time right for news literacy," he told PEN America. "We need political and funding momentum. This is worthy of a major investment. This problem is not going to go away." Alan Miller feels similarly: Today, the News Literacy Project has a small (albeit fast-growing) staff and no marketing budget. Nearly a decade since founding the organization, Miller only recently moved out of his basement office."

Scaling up is the biggest problem, but another challenge will be getting agreement on which news organizations are credible. Both the News Literacy Project and Stony Brook's program often use traditional mainstream news sources as examples of journalistically fair and accurate news. NLP's partners, too, are mostly mainstream news outlets, including the Los Angeles Times, The Wall Street Journal, CNN, The Philadelphia Inquirer, Bloomberg, and Politico, although they also work in partnership with newer media companies like BuzzFeed, VICE, Vox, and Mic.⁹²⁹

At a time when the sources of news consumption are increasingly seen as a political question, or an indication of political attitudes, families around the country may balk at having mainstream news outlets, which they may personally consider biased in their coverage or focus, held up as the



baseline for objective news. While these concerns may be misplaced, educators looking to implement news literacy programs in their communities should remain sensitive to the need to focus their programming on the standards and methods that make for good news and take pains to explain that news literacy is an issue of civics, not politics. Alan Miller notes, "We don't tell students what or who to trust but rather give them the tools to make those judgments for themselves. None of our partners has any influence over the content in our resources, and we are rigorously independent as well as nonpartisan."930 Miller also points to the fact that NLP has support from both liberal and conservative groups. The Dow Jones Foundation has been a generous funder of NLP.931 Mollie Hemingway, a senior editor at The Federalist and a contributor to Fox News, and Steve Schmidt, a Republican adviser to John McCain's 2008 presidential campaign, are on the board. 932 Michael Gerson, a Washington Post columnist and former speechwriter for George W. Bush, was previously on the board.933

News literacy courses are not a matter of right and left. They are designed to help students determine sources' reliability. State governments, in considering the implementation of news literacy efforts, must avoid even the appearance of enshrining certain news outlets as carrying governmental favor. This can easily be avoided by teaching from a wide array of journalistic sources and including sources from a diverse set of political viewpoints as long as they uphold journalistic standards. "Whether you're a Democrat or a Republican, right or left, we want people to go into the voting booth educated and prepared to make the best decision for our communities," Democratic Washington State Senator Marko Liias told PBS when discussing his support for media literacy initiatives. 934 "And if people can't discern fraudulent information from real information, that really corrodes the basic institutions of our democracy."

"The key point is that in eight years, working with thousands of teachers and schools in every state in the U.S., including in urban and rural areas, not a single student, teacher, parent, activist, journalist or anyone else has suggested that anything about our program or resources is partisan or biased in any way," said Miller.935 "Not a lesson, word of text, an image, or a video. We're extremely proud of this track record in this day and age."

The Road Ahead: Promising Approaches and Challenges

News literacy programs are among the most promising approaches to addressing the long-term harms posed by fraudulent news, because they hold the potential to reshape Americans' attitude toward, and evaluation of, the news media. There will always be efforts to spread false news online as long as there is financial or political gain to be had from doing so. But if there is a concerted, widespread, systematic effort to educate people, especially younger generations, about how to be savvy and responsible news consumers, the toxic effects of fraudulent news may be substantially lessened.

News literacy programs are also appealing from a free expression standpoint: Instead of relying on the government or powerful private companies to decide how to prevent fraudulent news-decisions that inevitably raise important questions about free speech and transparency—news literacy programs enable people to make their own informed judgments as to what they wish to read and believe.

Support the Expansion of News Literacy Initiatives: Given the importance of news literacy programs in providing a sustainable and proactive solution to fraudulent news, far more funding is needed to support these efforts and allow them to scale up to reach larger audiences. Currently, a patchwork of NGOs, media organizations, and universities are carrying this burden. Both public and private funders should begin examining how they can support this work so that it is present in communities nationwide.

Conduct Additional Research on Efficacy, Methods, and Long-Term Impact: More research is needed to examine the effectiveness of news literacy programs, both collectively and individually: At what ages are news literacy courses best taught? Which models, formats, and lesson types resonate most with students? Which news literacy skills are students retaining after the end of the program? In states that require news literacy programs in schools, how effectively have they been implemented, and what are the results? Understanding the effectiveness of these programs, and the state laws that implement them, will require iterative data gathering and evaluation by researchers, which in turn will require additional funding to support these research initiatives.

Develop More Community-Level Programs for Adults: While schools provide the right venue for news literacy programs for children, there are ongoing questions about how these programs can best reach adults. Local libraries and community centers are natural partners for such initiatives. Indeed, libraries are well poised, given their historical role as educational centers and community resources, to play a meaningful role in teaching and fostering news literacy.

Remain Neutral and Independent: In an era of marked political partisanship, parents in communities across the country will be hyper-alert to any possibility that news literacy programs are encouraging a particular viewpoint or privileging certain news outlets. To forestall these criticisms, news literacy efforts should be sure to teach comprehensive and diverse criteria for assessing the credibility of the news sources, and should explain what they teach and why. News literacy efforts should include instruction on the best standards of journalism, including methodology and internal processes for fact-checking, adherence to a code of ethics, and other markers of good journalism.

Demonstrate Public, Bipartisan, Widespread Support: Educators, librarians, and public officials should stand up for news literacy programs and make the case for their value as a benefit to the entire country and the health of our democracy.

RECOMMENDATIONS

While much of the debate over solutions has focused on the role of government, news outlets, social media platforms, and civil society actors like fact-checking groups, the power of fraudulent news lies ultimately in the minds of the beholders-namely, news consumers. The inhabitants of a democracy must be empowered agents who consume information in intentional and sophisticated ways. Recognizing fraudulent news as a threat to free expression should not be employed as a justification for broad new government or corporate restrictions on speech, measures whose effects would be far more harmful to free speech. Unscrupulous profiteers and political opportunists may never cease in their efforts to infect the global information flow of information to serve their purposes. The best prescription against the epidemic of fake news is to inoculate consumers by building up their ability to defend themselves.

Accordingly, measures to address the crisis of truth should first and foremost center on enabling and equipping people to derive, discern, and digest information in ways that gird against the influence of mendacious publication. Based on our examination of the range of approaches to fraudulent news that have been employed by governments, social media outlets, news organizations, research institutes, and nonprofit groups, PEN America has identified six prongs of response that are critical to stemming the current crisis and averting the most dangerous harms.

For Policymakers, Educators, Educational Institutions, and Education Leaders

Educate the public and future generations by mounting a massive effort to create informed consumers of news across all platforms and mediums:

- Adopt news literacy education as a core part of school curricula.
- Conduct research on the most effective forms of news-related public education and empowerment.
- Engage teacher training programs and graduate education schools to equip teachers to teach news literacy.
- Leverage print, digital, television, and other media platforms with the reach to inform youth and citizens at large on news literacy.

For Technology and Social Media Platforms and Other News Intermediaries

Equip the public to distinguish fact from falsehood and to assess the credibility of information:

- Identify purveyors of fraudulent news—clearly and narrowly defined as the purveyors of demonstrably false information that is being presented as fact in an effort to deceive the public—and take steps to ensure that they are not able to sustain themselves and profit from access to advertising services on your platforms.
- Establish an appeal mechanism for owners of web pages or sites that are blocked from ad services or who suspect that their site has been de-emphasized in a platform's algorithms, so that the grounds on which the page was blocked or deprioritized can be reviewed and, if appropriate, reversed.
- Develop additional strategies to ensure that fraudulent news is not presented to users in sections of platforms classified as "news" or that otherwise suggest that the information is credible (like Google's "best answer" feature).
- Invest further in technologies to more quickly and comprehensively identify efforts to artificially boost content through the use of bots or other means, and flag these efforts in a manner that's visible to users.
- Strengthen and expand partnerships with independent fact-checking organizations to feature their work, make it easily accessible to users, and collaborate to reduce duplication of effort in fact-checking particular items.
- Support news literacy initiatives through funding and partnerships.
- Develop additional ways to offer users content that may differ from their own beliefs or views, in ways that are transparent to users and sustain their control over what they see.
- Appoint independent ombudspersons to respond to concerns raised by users, the public, and policy makers, and empower them to publicly explain (and, when necessary, critique) the platform's response to issues of public importance.
- Work in collaboration with academic researchers and civil liberties advocates to identify ways to share more information with researchers about the spread of fraudulent news on specific platforms and the efficacy of efforts to address it, consistent with appropriate privacy protections for users, and free expression rights for news media outlets.



Allow employees to speak more openly with journalists about the challenges faced in combatting the spread of fraudulent news.

For News Outlets

Exemplify the values and tenets of credible news gathering and dissemination:

- Continue to emphasize transparency of operations as a high priority, including finding new ways to be more open with readers about the journalistic and editing processes and the handling of errors.
- Clearly label different types of content as reporting, commentary, opinion, analysis, etc.
- Establish, reinstate, and augment ombudsperson functions to underscore transparency, commitment to professionalism, and accountability to readers.
- Prioritize reporting on the harms posed by the spread of fraudulent news and the ways individuals can help.
- Engage proactively in civic and education initiatives to improve media literacy, including outlet audiences and communities.

For News Outlets, Social Media Platforms, Educators, Research Institutes, and Civil Society

Engage directly with diverse groups of citizens to better understand the drivers that influence their interest and trust in the news media:

- Support and conduct research to better understand the drivers of media distrust, the strategies that can foster an appetite for a broad range of news sources, and the skills to evaluate those sources among news consumers.
- Consider diverse readerships when covering polarizing topics or mounting campaigns to combat fraudulent news.
- Involve authoritative voices from across the political spectrum in efforts to defend press freedom and the role of truth.
- When offering fact-checking, emphasize transparency and objectivity of operations, including explanations of what is chosen to be fact-checked, the verification process, and the reasoning behind sometimes evolving conclusions.

For News Organizations and Civil Society

Expose those who deliberately purvey fraudulent information or baselessly foment distrust of what is true:

Prioritize reporting on the purveyors of fraudulent news, the methods they use to manufacture and spread it, and the approaches under way to curb its spread.

For Policymakers, News Outlets, Social Media Platforms, and Civil Society

Empower individuals with a set of recognized rights that can help counter practices that interfere with informed news consumption:

- Publicly reject all efforts to denigrate the news media or undercut the legitimacy of their work and reaffirm commitment to freedom of the press.
- Explore ways to better protect journalists from being compelled to disclose sources, especially with respect to sensitive national security and criminal justice stories.
- Support efforts by diverse groups of news consumers to mobilize in defense of their own rights to receive and impart in information.
- Educate news consumers to enforce their rights and fulfill their responsibilities.
- Publicly express support for press freedom and respect for journalists.
- Oppose government efforts that would impinge on free expression by penalizing online platforms for failing to remove fraudulent news from their platforms, or by otherwise requiring platforms to act as arbiters of fact.

METHODOLOGY AND ACKNOWLEDGMENTS

This report is based on interviews with experts on free expression, press freedom, online speech, and fraudulent news, including journalists, editors, scholars, experts, technology and social media company representatives, and civil society advocates. The report also includes an extensive review of secondary sources, including books, scholarly articles, civil society reports, and news articles.

This report was researched and drafted by Alicia Shepard, media writer, former NPR ombudsman and independent journalist. It was edited by PEN America staff members Katy Glenn Bass, Laura Macomber, Dru Menaker, Gabe Rottman, and James Tager. It was copy edited by Susan Chumsky. Pettypiece and Co. did graphic design. Emily Whitfield provided media advice. PEN America extends special thanks to Kira Zalan for significant research and editing assistance, and to interns Chelsea Kirk and Stephan Kozub for research assistance.

PEN America is grateful to Dan Gillmor, Nicholas Lemann, Alexios Mantzarlis, and Alan Miller for reviewing sections of the report, and to the numerous journalists, editors, scholars, and experts who agreed to be interviewed for this report. Our abiding appreciation goes to the Fritt Ord Foundation and to Jerry and Sheree Friedman for their support of this project.

ENDNOTES

- "PEN International Charter," PEN International, accessed Oct. 6, 2017, http://www.pen-international.org/ wp-content/uploads/2011/04/PEN-Charter.pdf
- "International Covenant on Civil and Political Rights," Article 19, United Nations Human Rights Office of the High Commissioner, Dec. 16, 1966, accessed Oct. 5, 2017, www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx
- Art Swift, "Americans' Trust in Mass Media Sinks to New Low," Gallup, Sept. 14, 2016, www.gallup.com/poll/195542/ 3 americans-trust-mass-media-sinks-new-low.aspx
 - 4 "Global Results," 2017 Edelman Trust Barometer, Slide 12, Jan. 15, 2017, www.edelman.com/global-results/
- Richard Edelman, "An Implosion of Trust," 2017 Edelman Trust Barometer, Jan. 15, 2017, www.edelman.com/p/6a-m/an-implosion-of-trust/
- Gary Langer, "Lies, Damn Lies and the Deep State: Plenty of Americans See Them All," ABC News/Washington Post Poll, The Washington Post, Apr. 27, 2017, www.langerresearch.com/wp-content/uploads/1186a4DeepStateFakeNews. pdf
- "How Trust Can be Broken, and the Decline of Confidence in the Press," American Press Institute, Apr. 17, 2016, www.americanpressinstitute.org/publications/reports/survey-research/lose-trust/
- "How trust can be broken, and the decline of confidence in the press," American Press Institute, Apr. 17, 2016, www.americanpressinstitute.org/publications/reports/survey-research/lose-trust/
- Michael Barthel, Amy Mitchell, and Jesse Holcomb, "Many Americans Believe Fake News Is Sowing Confusion," Pew Research Center, Dec. 15, 2016, www.journalism.org/2016/12/15/many-americans-believe-fake-news-is-sowing-confusion/
- Camila Domonoske, "Students Have a Dismaying Inability to Tell Fake News from Real, Study Finds," Nov. 23, 2016, www.npr.org/sections/thetwo-way/2016/11/23/503129818/study-finds-students-have-dismaying-inability-to-tell-fakenews-from-real
- R. Hobbus J.D., "U.S. to House 250,000 Syrian Refugees at Navajo, Standing Rock Indian Reservations," Real News Right Now, Sept. 6, 2015, http://realnewsrightnow.com/2015/09/u-s-to-house-250000-syrian-refugeesat-navajo-standing-rock-indian-reservations/
- Becky Bratu, Erin Calabrese, Kurt Chirbas, Emmanuelle Saliba, and Adam Howard, "Tall Tale or Satire? Authors of So-Called Fake News Feel Misjudged," NBC News, Dec. 15, 2016, www.nbcnews.com/news/us-news/ tall-tale-or-satire-authors-so-called-fake-news-feel-n689421
- Ishmael N. Daro, "How A Prankster Convinced People The Amish Would Win Trump The Election," BuzzFeed, Oct. 28, 2016, www.buzzfeed.com/ishmaeldaro/paul-horner-amish-trump-vote-hoax?utm_term=.srNZO05a6#.wh9Enjly6
- Louis Jacobson, "No, someone wasn't paid \$3,500 to protest Donald Trump; it's fake news," PolitiFact, Nov. 17, 2016, www.politifact.com/truth-o-meter/statements/2016/nov/17/blog-posting/no-someone-wasnt-paid-3500-protestdonald-trump-it/
- Zack Ford, "The Real Threat of Suicide Contagion Under A Trump Presidency," Think Progress, Nov. 18, 2016, https://thinkprogress.org/suicide-contagion-election-e8f2bc2c09c6/

- Zach Stafford, "Update: as we continue to investigate the reported suicides, I've spoken w/ GLAAD and we feel it best to take down the original tweet," Twitter, accessed Oct. 6, 2017, https://twitter.com/ZachStafford/status/796811858569216001
- 17 Kim LaCapria, "Election Related Transgender Youth Suicides," Snopes, Nov. 9, 2016, www.snopes.com/transgender-suicides-after-2016-election/
- Michael Barthel, Amy Mitchell And Jesse Holcomb, "Many Americans Believe Fake News Is Sowing Confusion," Pew Research Center, Dec. 15, 2016, www.journalism.org/2016/12/15/many-americans-believe-fake-news-is-sowing-confusion/
- 19 Chengcheng Shao, Giovanni Luca Ciampaglia, Onur Varol, Alessandro Flammini, and Filippo Menczer, "The Spread of Fake News by Social Bots," Indiana University, Bloomington, Aug. 7, 2017, https://arxiv.org/pdf/1707.07592.pdf
- Simon Rosenberg, "A Primer on Social Media Bots and Their Malicious Use in U.S. Politics," NDN, Sept. 13, 2017, www.ndn.org/bots
- 21 Emerging Technology from the ArXiv, "First Evidence that Social Bots Play a Major Role in Spreading Fake News," MIT Technology Review, Aug. 7, 2017, www.technologyreview.com/s/608561/first-evidence-that-social-bots-play-a-major-role-in-spreading-fake-news/
- 22 Craig Silverman, "This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook," BuzzFeed, Nov. 16, 2016, www.buzzfeed.com/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook?utm_term=.pxpOMO6nMj#.hcK4r4BMrz
 - 23 ld.
 - 24 ld.
- Mallory Shelbourne, "Infowars' Alex Jones Apologizes for Pushing 'Pizzagate' Conspiracy Theory," *The Hill*, Mar. 25, 2017, http://thehill.com/homenews/325761-infowars-alex-jones-apologizes-for-pushing-pizzagate-conspiracy-theory
- Joshua Gillin, "How Pizzagate Went from Fake News to a Real Problem for a D.C. Business," PolitiFact, Dec. 5, 2017, www.politifact.com/truth-o-meter/article/2016/dec/05/how-pizzagate-went-fake-news-real-problem-dc-busin/; Aria Bendix, "Pizzagate Shooter to Serve Four Years in Jail," *The Atlantic*, Jun. 22, 2017, https://www.theatlantic.com/news/archive/2017/06/dcs-pizzagate-shooter-sentenced-to-4-years-in-jail/531381/
- Kevin Roose, "After Las Vegas Shooting, Fake News Regains Its Megaphone," *The New York Times*, Oct. 2, 2017, https://www.nytimes.com/2017/10/02/business/las-vegas-shooting-fake-news.html; Aja Romano, "Most People Saw the Las Vegas Shooting as a Tragedy. Propagandists Saw an Opportunity," *Vox*, Oct. 5, 2017, www.vox.com/culture/2017/10/5/16400394/las-vegas-shooting-fake-news-propaganda
- James Tager, Katy Glenn Bass, and Gabe Rottman, "Trump the Truth: Free Expression in the President's First 100 Days," PEN America, Apr. 27, 2017, https://pen.org/wp-content/uploads/2017/04/PEN_Trump_Truth_v3_low-res.pdf
 - 29 ld.
- Nick Cumming-Bruce, "U.N. Human Rights Chief Condemns Trump's Attacks on Media," *The New York Times*, Aug. 30, 2017, www.nytimes.com/2017/08/30/world/europe/trump-press-united-nations.html?mcubz=3
- Michael Calderone, "Trump Takes Authoritarian Stance in Portraying Journalists as Anti-American Enemy," The Huffington Post, Aug. 23, 2017, www.huffingtonpost.com/entry/donald-trump-portrays-journalists-as-anti-american_us_599da653e4bOd8dde99a844c

- Martin Pengelly and Joanna Walters, "Trump Accused of Encouraging Attacks On Journalists By CNN Body-Slam Tweet," The Guardian, Jul. 2, 2017, www.theguardian.com/us-news/2017/jul/02/trump-body-slam-cnn-tweet-violence-reporters-wrestlemania
- "Trump Ties To Russia Are Illegal Or Unethical, U.S. Voters Tell Quinnipiac University National Poll; Vot-33 ers Disapprove 2-1 Of Pulling Out Of Paris Accord," Quinnipiac University Poll, Jun. 7, 2017, https://poll.qu.edu/ national/release-detail?ReleaseID=2462
- Jeremy W. Peters, "Wielding Claims of 'Fake News,' Conservatives Take Aim at Mainstream Media," The New York Times, Dec. 25, 2016, www.nytimes.com/2016/12/25/us/politics/fake-news-claims-conservatives-mainstream-media-.html?mcubz=1
 - 35 ld.
- Ken Miller, As hyper-conservative media surged, Republicans' trust in news cratered," TechCrunch, Mar. 19, 2017, https://techcrunch.com/2017/03/19/as-hyper-conservative-media-surged-republicans-trust-in-news-cratered/
- Jonathan Easley, "Poll: Majority Says Mainstream Media Publishes Fake News," May 24, 2017, http://thehill. com/homenews/campaign/334897-poll-majority-says-mainstream-media-publishes-fake-news
- Art Swift, "Americans' Trust in Mass Media Sinks to New Low," Gallup, Sept. 14, 2017, http://www.gallup.com/ poll/195542/americans-trust-mass-media-sinks-new-low.aspx
- Amy Mitchell, Jeffrey Gottfried, Jocelyn Kiley and Katerina Eva Matsa, "Political Polarization and Media 39 Habits, Pew Research Center, Oct. 21, 2014, www.journalism.org/2014/10/21/political-polarization-media-habits/
- Jeffrey Gottfried, Michael Barthel and Amy Mitchell, "Trump, Clinton Voters Divided in Their Main Source for Election News," Pew Research Center, Jan. 18, 2017, www.journalism.org/2017/01/18/trump-clinton-voters-divided-in-their-main-source-for-election-news/
- Yochai Benkler, Robert Faris, Hal Roberts, and Ethan Zuckerman, "Study: Breitbart-led right-wing media 41 ecosystem altered broader media agenda," Columbia Journalism Review, Mar. 3, 2017, https://www.cjr.org/analysis/ breitbart-media-trump-harvard-study.php
 - ld. 42
- AP, "Germany approves bill curbing online hate crime, fake news," CNBC, Apr. 6, 2017, www.cnbc. com/2017/04/06/germany-fake-news-fines-facebook-twitter.html
- Jessica Taylor, "Americans Say Civility Has Worsened Under Trump; Trust In Institutions Down," NPR, PBS Newshour, Marist, National Public Radio, Jul. 3, 2017, www.npr.org/2017/07/03/535044005/americans-say-civility-has-worsened-under-trump-trust-in-institutions-down
- Staff and Agencies, "Germany approves plans to fine social media firms up to €50 million," *The Guardian*, Jun. 30, 2017, www.theguardian.com/media/2017/jun/30/germany-approves-plans-to-fine-social-media-firms-up-to-50m
- "Bahrain: Activist Nabeel Rajab jailed for 'fake news," BBC, July 10, 2017, http://www.bbc.com/news/worldmiddle-east-40558063; "Egypt arrests Al Jazeera producer on fake news charge," Committee to Protect Journalists, Dec. 27, 2016, https://cpj.org/2016/12/egypt-arrests-al-jazeera-producer-on-fake-news-cha.php; "Six journalists arrested over 'false news' on mutiny," Al Jazeera, Feb. 12, 2017, http://www.aljazeera.com/news/2017/02/journalists-arrested-false-news-mutiny-170213035829283.html

- 47 False news, Article 19, accessed Oct. 10, 2017, https://www.washingtonpost.com/news/theworldpost/wp/2017/10/03/history-proves-how-dangerous-it-is-to-have-the-government-regulate-fake-news/?utm_term=. bcd8dd2677ddhttps://www.article19.org/pages/en/false-news.html; Flemming Rose and Jacob Mchangama, "History proves how dangerous it is to have the government regulate fake news," The Washington Post, Oct. 3, 2017,
- Eric Pape, "Trump Attacks the Press, Cambodia Winds Up Collateral Damage," The Daily Beast, Sept. 8, 2017, www.thedailybeast.com/trump-attacks-the-press-cambodia-winds-up-collateral-damage; Van Roeun, Zsombor Peter and Chhorn Phearun, "Hun Sen Demands Closure Of NGO Over CNN 'Insult," The Cambodian Daily, Aug. 2, 2017, https://www.cambodiadaily.com/news/hun-sen-demands-closure-of-ngo-over-cnn-insult-133139/
- Joanna Berendt, "Poland's President Approves Controls on State Media, Alamring E.U. Leaders," *The New York Times*, Jan 7, 2016, www.nytimes.com/2016/01/08/world/europe/poland-andrzej-duda-press-freedom.html?mcubz=3
- Joanna Berendt, "Poland's President Approves Controls on State Media, Alamring E.U. Leaders," *The New York Times*, Jan 7, 2016, www.nytimes.com/2016/01/08/world/europe/poland-andrzej-duda-press-freedom.html?mcubz=3
- 51 Alex Wigglesworth, "Trump vows to team up with Poland's president to fight 'fake news," Jul. 8, 2017, www. latimes.com/politics/la-pol-updates-trump-tweets-poland-president-handshake-fake-news-htmlstory.html
- 52 "Fake News," Google Trends, accessed Oct. 5, 2017, trends.google.com/trends/explore?date=today%205-y&geo=US&q=Fake%20News
 - 53 Id.
 - 54 Bill Adair, Duke Reporters' Lab, accessed Oct. 6, 2017, https://reporterslab.org/fact-checking/
- Michelle Ye Hee Lee, "Fighting falsehoods around the world: A dispatch on the growing global fact-checking movement," The Washington Post, Jul. 14, 2017, www.washingtonpost.com/news/fact-checker/wp/2017/07/14/fighting-falsehoods-around-the-world-a-dispatch-on-the-global-fact-checking-movement/?utm_campaign=efb507a271-EMAIL_CAMPAIGN_2017_07_17&utm_medium=email&utm_source=Pew%20Research%20Cen&utm_term=.01dfo08aa107
- Bill Adair, "What Happened on Election Day," *The New York Times*, accessed Oct. 6, 2017, www.nytimes.com/interactive/projects/cp/opinion/election-night-2016/keep-on-fact-checking
- Barbara Ortutay, "Facebook, Google roll out new fact-checking measures," *The Chicαgo Tribune*, Apr. 7, 2017, www.chicagotribune.com/bluesky/technology/ct-facebook-google-fact-checking-fake-news-20170407-story.html
- Joshua Gillin, "PolitiFact's Guide to Fake News Websites and What They Peddle," PolitiFact, Apr. 20, 2017, www.politifact.com/punditfact/article/2017/apr/20/politifacts-guide-fake-news-websites-and-what-they/
- Graham Lanktree, "Trump's First 100 Days Shows a President Obsessed with 'Fake News' and Twitter," Newsweek, Apr. 28, 2017, www.newsweek.com/twitter-trumps-first-100-days-show-president-obsessed-fake-news-591595
- Donald J. Trump, Twitter, accessed Oct. 6, 2017, "Fascinating to watch people writing books and major articles about me and yet they know nothing about me & have zero access. #FAKE NEWS!," https://twitter.com/realdonaldtrump/status/907588803161939968?lang=en
- Donald J. Trump, Twitter, accessed Oct. 6, 2017, ""Last night in Phoenix I read the things from my statements on Charlottesville that the Fake News Media didn't cover fairly. People got it!," https://twitter.com/realdonaldtrump/status/900352052068401154?lang=en; see also Amanda Willis and Alysha Love, "All the President's Tweets," CNN, Oct. 5, 2017, accessed Oct. 6, 2017, www.cnn.com/interactive/2017/politics/trump-tweets/
- "James Madison to W. T. Barry," Aug. 4, 1822, *The Founders Constitution*, accessed Oct. 6, 2017, http://press-pubs.uchicago.edu/founders/documents/v1ch18s35.html

- Masha Gessen, "Why We Must Protest," Literary Hub, Nov. 21, 2016, http://lithub.com/masha-gessen-why-we-63 must-protest/
- Masha Gessen, "Autocracy: Rules for Survival," The New York Review of Books, Nov. 10, 2016, www.nybooks. com/daily/2016/11/10/trump-election-autocracy-rules-for-survival/
- Abby Ohlheiser, "A running list of viral hoaxes about Irma-including one shared by the White House," The Washington Post, Sept. 11, 2016, www.washingtonpost.com/news/the-intersect/wp/2017/09/06/irma-is-not-a-category-6-hurricane-a-running-list-of-viral-hoaxes-about-the-storm/?utm_term=.88db9c4063d7; KHOU-TV, "Fake image of Hurricane Irma shows storm path toward Texas," KHOU, Sept. 1, 2017, http://www.khou.com/weather/hurricane-central/ fake-image-of-hurricane-irma-shows-false-storm-path/470012360
- 66 Georgina Rannard, "Hurricane Irma: Not everyone falls for fake news," BBC News, Sept. 11, 2017, http://www. bbc.com/news/blogs-trending-41224792
- Sam Levin, "Las Vegas survivors furious as YouTube promotes clips calling shooting a hoax," Oct. 4, 2017, https://www.theguardian.com/us-news/2017/oct/04/las-vegas-shooting-youtube-hoax-conspiracy-theories
- 68 Masha Gessen, "The Threat of Moral Authority," The New York Review of Books, Jan. 18, 2017, http://www. nybooks.com/daily/2017/01/18/threat-of-moral-authority-john-lewis-trump/
- "Speaking Appearances," NPR Ethics Handbook, accessed Oct. 6, 2017, http://ethics.npr.org/tag/speaking-ap-69 pearances/
- "Guidelines on Integrity," The New York Times, accessed Oct. 6, 2017, https://www.nytco.com/wp-content/ uploads/sites/3/Guidelines-on-Integrity-updated-2008.pdf
- "The Washington Post Standards and Ethics," The Washington Post, accessed Oct. 6, 2017, http://asne.org/ content.asp?contentid=335
- Financial purveyors of fraudulent news are in fact nihilistic toward the truth. They do not necessarily want to 72 persuade others that their news stories are true. They just want people to click and share the stories. While in a strict sense they do not "intend" to deceive others, in a broader sense their financial success depends upon the ability to deceive.
 - 73 Lovell v. City of Griffin, 303 U.S. 444 (1938)
- 74 UN General Assembly, International Covenant on Civil and Political Rights, Article 19, 16 December 1966, United Nations, Treaty Series, vol. 999, p. 171, available at: http://www.refworld.org/docid/3ae6b3aa0.html [accessed 26 September 2017] (hereinafter ICCPR)
- Bd. of Educ. v. Pico, 457 U.S. 867 (Brennan, Concurrence) (1982). See also Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, 425 U.S. 748, 757 (1976); Richmond Newspapers v. Virginia, 448 U.S. 555 (1980); Houchins v. KQED, Inc., 438 U.S. 1 (1978). See generally David L. Hudson, Jr., First Amendment Right to Receive Information and Ideas Justifies Citizens' Videotaping of the Police, 10 U. St. Thomas J.L. & Pub. Pol'y 89 (2016); Jamie Kennedy, Comment, The Right to Receive Information: The Current State of the Doctrine and the Best Application for the Future, 35 SETON HALL L. REV. 789, 818 (2005).
 - 76 ICCPR Article 20.
- "Prohibiting Incitement to Discrimination, Hostility or Violence," Article 19 Policy Brief, December 2012, h\$p:// 77 bit.ly/1MInosL
- John D.H. Dowing, "'Hate speech' and 'First Amendment Absolutism' Discourses in the US," Discourse & Society Vol.10, No. 2 (1999), h\$p://bit.ly/2cCdexh

- 79 Palko v. State of Connecticut, 302 U.S. 319, 320 (1937).
- 80 National Socialist Party of America v. Village of Skokie, 432 U.S. 43 (1977); Brandenburg v. Ohio, 395 U.S. 444 (1969).
- 81 Snyder v. Phelps, 580 F.3d 206 (2011). See also Bill Mears, "Anti-gay church's right to protest at military funerals is upheld," CNN, March 2, 2011, h\$p://cnn.it/2dDSnP5
- 82 Chaplinsky v. New Hampshire, 315 US 568 (1942), https://supreme.justia.com/cases/federal/us/315/568/case. html, David L. Hudson, Jr. "Fighting Words," First Amendment Center, Nov. 5, 2003, http://www.firstamendmentcenter. org/fighting-words/
 - 83 Elonis v. United States, 575 US _ (2015)
- Speech that communicates intent to commit unlawful violence, "where a person directs a threat to a person or group of persons with the intent of placing the victim in fear of bodily harm or death," *Virginia v. Black*, 538 U.S. 343, 60 (2003).
- 85 The last prong of the three-part test for obscenity put forward in *Miller v. California* is updated to assess whether the allegedly obscene material has "serious value" to a "reasonable person." Pope v. Illinois, 481 U.S. 497 (1987).
- Defamatory speech against a public official is punishable if it was found to be made with "actual malice." The New York Times Co. v Sullivan, 376 U.S. 254, 280 (1964).
- Speech likely to incite reasonable people to immediate violence, where "advocacy is directed to inciting or producing imminent lawless action and is likely to incite or produce such action," *Brandenburg v. Ohio*, 395 U.S. 444, 447 (1969) (emphasis in original); Hess v. Indiana, 414 US 105 (1973); Rice v. Paladin Press, 128 F.3rd 233 (1997)
 - 88 E.g. Times v. Sullivan, 376 US 254 (1964).
- US v. Alvarez, 576 US __ (2012) (Hereinafter "US v. Alvarez"): "[False statements of fact are particularly valueless [because] they interfere with the truth-seeking function of the marketplace of ideas," Hustler Magazine, Inc. v. Falwell, 485 U. S. 46, 52 (1988), and that false statements "are not protected by the First Amendment in the same manner as truthful statements," Brown v. Hartlage, 456 U. S. 45, 60-61 (1982). See also, e.g., Virginia Bd. of Pharmacy, supra, at 771 ("Untruthful speech, commercial or otherwise, has never been protected for its own sake"); Herbert v. Lando, 441 U. S. 153, 171 (1979) ("Spreading false information in and of itself carries no First Amendment credentials"); Gertz, supra, at 340 ("[T]here is no constitutional value in false statements of fact"); Garrison v. Louisiana, 379 U. S. 64, 75 (1964) ("[T]he knowingly false statement and the false statement made with reckless disregard of the truth, do not enjoy constitutional protection").
 - 90 US v Alvarez.
 - 91 376 US 254 (1964).
- See e.g. Roy S. Gutterman, "The Landmark Libel Case, Times v. Sullivan, Still Resonates 50 Years Later," Forbes Opinion, Mar. 5, 2014, https://www.forbes.com/sites/realspin/2014/03/05/the-landmark-libel-case-times-v-sullivan-still-resonates-50-years-later/#2b4736bb585a ("there may be no modern Supreme Court decision that has had more of an impact on American free speech values . . one of a handful of First Amendment decisions vital to ensuring a free press and protecting free speech.")
 - 93 Gertz v. Robert Welch, Inc., 418 US 323 (1974).
 - 94 See e.g. US v. Alvarez (Breyer, J, Concurrence).

- US v. Alvarez, (Breyer, J, concurrence). See also US v. Alvarez: "([previous quoted language against false 95 speech] all derive from cases discussing defamation, fraud, or some other legally cognizable harm associated with a false statement, such as the invasion of privacy or the costs of vexatious litigation.")
 - 96 US. v. Alvarez.
- See, e.g., Austin v. Michigan Chamber of Commerce, 494 U.S. 652, 655 (1990). See generally Erwin Chem-97 erinsky, Constitutional Law: Principles and Policies 237 (2d ed. 2001).
- E.g. Steven L. Emanuel, Constitutional Law: Seventh Edition, WoltersKluwer (2008), p. 32, fn. 3, "content-based regulation of speech is almost never found to be a 'necessary' means of achieving even a compelling governmental evil."
- Facebook, Newsroom, Our History, accessed Oct. 4, 2017, https://newsroom.fb.com/company-info/; Nicholas Carlson, "At Last - The Full Story of How Facebook Was Founded," Business Insider, Mar. 5, 2010, http://www.businessinsider.com/how-facebook-was-founded-2010-3
- Chloe Albanesius, "10 Years Later: Facebook's Design Evolution," PC, Feb 4, 2014, https://www.pcmag.com/ 100 feature/320360/10-years-later-facebook-s-design-evolution
- Chloe Albanesius, "10 Years Later: Facebook's Design Evolution," PC, Feb 4, 2014, https://www.pcmag.com/ feature/320360/10-years-later-facebook-s-design-evolution
- Facebook, Company Info, Stats, accessed Oct. 5, 2017, https://newsroom.fb.com/company-info/; Josh Constine, "Facebook now has 2 billion monthly users... and responsibility," Tech Crunch, June 27, 2017, https://techcrunch. com/2017/06/27/facebook-2-billion-users/
- News Use Across Social Media Platforms 2017, "Social media sites as pathways to news," Pew Research Center, Sept. 5, 2017, http://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/pi 17-08-23 socialmediaupdate_0-04/
- "Facebook Gets a Facelift," Facebook, Sept. 5, 2006, https://www.facebook.com/notes/facebook/facebook-104 gets-a-facelift/2207967130; "Facebook Launches Additional Privacy Controls for News Feed and Mini-Feed," Facebook, Sept. 8, 2006, https://newsroom.fb.com/news/2006/09/facebook-launches-additional-privacy-controls-for-news-feedand-mini-feed/
- "Facebook Enables Users to Share Video, Photos, News, Blogs and More from Anywhere on the Web," Facebook, Oct. 31, 2006, https://newsroom.fb.com/news/2006/10/facebook-enables-users-to-share-video-photos-newsblogs-and-more-from-anywhere-on-the-web/
- Varun Kacholia, "News Feed FYI: Helping You Find More News to Talk About," Facebook, Dec. 2, 2013, https:// newsroom.fb.com/news/2013/12/news-feed-fyi-helping-you-find-more-news-to-talk-about/
- Josh Constine, "How Facebook News Feed Works," Tech Crunch, Sep. 6, 2016, https://techcrunch. com/2016/09/06/ultimate-guide-to-the-news-feed/
- Diana Hsu and Andrew Song, "Updates to Trending," Facebook, Dec. 10, 2014, https://newsroom.fb.com/ news/2014/12/updates-to-trending/
- "Search FYI: An Update to Trending," Facebook, Aug. 26, 2016, https://newsroom.fb.com/news/2016/08/searchfyi-an-update-to-trending/
- Will Cathcart, "Continuing Our Updates to Trending," Facebook, Jan. 25, 2017, https://newsroom.fb.com/ news/2017/01/continuing-our-updates-to-trending/

- 111 Ali Ahmadi, "Update on Trending," Facebook, May 24, 2017, https://newsroom.fb.com/news/2017/05/update-on-trending/
- Andrew Anker, Sara Su, and Jeff Smith, "News Feed FYI: New Test to Provide Context About Articles," Facebook, Oct. 5, 2017, https://newsroom.fb.com/news/2017/10/news-feed-fyi-new-test-to-provide-context-about-articles/
- News Use Across Social Media Platforms 2017, "Social media sites as pathways to news," *Pew Research Center,* Sept. 5, 2017, http://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/pi_17-08-23_socialmedia-platforms-2017/pi_17-0
- Juju Chang, Jake Lefferman, Claire Pedersen and Geoff Martz, "When Fake News Stories Make Real News Headlines," ABC News, Nov. 29, 2016, ("Facebook is the platform where this stuff is taking off and going viral," said BuzzFeed's Craig Silverman, who has studied the spread of fake news) http://abcnews.go.com/Technology/fake-news-stories-make-real-news-headlines/story?id=43845383.;

Fresh Air "Fake News Expert On How False Stories Spread And Why People Believe Them," NPR, Dec. 14, 2016, (Dave Davies interviews Craig Silverman of BuzzFeed News), http://www.npr.org/2016/12/14/505547295/fake-news-expert-on-how-false-stories-spread-and-why-people-believe-them

- 115 PEN America interview with Craig Silverman, May 10, 2017 (phone)
- 116 PEN America interview with Craig Silverman, May 10, 2017 (phone)
- PEN America interview with Karen Wickre, May 1, 2017
- Parmy Olson, "How Facebook Helped Donald Trump Become President," Forbes, Nov. 9, 2016, https://www.forbes.com/sites/parmyolson/2016/11/09/how-facebook-helped-donald-trump-become-president/; Olivia Solon, "Facebook's failure: did fake news and polarized politics get Trump elected?," The Guardian, Nov. 10, 2016, https://www.theguardian.com/technology/2016/nov/10/facebook-fake-news-election-conspiracy-theories; Alyson Shontell, "Facebook is being blamed for Trump's election but Mark Zuckerberg's response is tone deaf," Business Insider, Nov. 11, 2016, http://www.businessinsider.com/facebook-blamed-trump-election-mark-zuckerberg-response-tone-deaf-2016-11
- Olivia Solon, "Facebook's failure: did fake news and polarized politics get Trump elected?," *The Guardian*, Nov. 10, 2016, https://www.theguardian.com/technology/2016/nov/10/facebook-fake-news-election-conspiracy-theories
- Jefferson Graham, "Hillary Clinton tech has to fix fake news," USA Todαy, May 31, 2017, https://www.usatoday.com/story/tech/talkingtech/2017/05/31/hrc-tech-has-fix-fake-news/102357904/
- Casey Newton, "Zuckerberg: the idea that fake news influenced the election is 'crazy,'" *The Verge*, Nov. 10, 2016, https://www.theverge.com/2016/11/10/13594558/mark-zuckerberg-election-fake-news-trump
 - 122 Mark Zuckerberg status update, Facebook, Nov. 13, 2016, https://www.facebook.com/zuck/posts/10103253901916271
- Noa Shavit, "Data on Facebook's fake news problem," *Jumpshot Tech Blog*, Nov. 29, 2016, https://www.jumpshot.com/data-facebooks-fake-news-problem/
- Noa Shavit, "Data on Facebook's fake news problem," *Jumpshot Tech Blog*, Nov. 29, 2016, https://www.jumpshot.com/data-facebooks-fake-news-problem/
- Philip Bump, "Denzel Washington endorsed Trump, according to AmericaNews, Breitbart, USANewsHome And Facebook," *The Washington Post*, Nov. 14, 2016, https://www.washingtonpost.com/news/the-fix/wp/2016/11/14/denzel-washington-endorsed-trump-according-to-americanews-breitbartt-usanewshome-and-facebook/?utm_term=. 644daodd8a85; Allison Graves, "Fake story says Denzel Washington supports Donald Trump," *PolitiFact*, Nov. 16, 2016, http://www.politifact.com/punditfact/statements/2016/nov/16/americanpoliticnews/fake-story-says-denzel-washington-supports-donald-/

- Noa Shavit, "Data on Facebook's fake news problem," Jumpshot Tech Blog, Nov. 29, 2016, https://www.jumpshot. 126 com/data-facebooks-fake-news-problem/
- Craig Silverman, "This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook," BuzzFeed News, Nov. 16, 2016, https://www.buzzfeed.com/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook?utm_term=.sxrDpoRPRg#.sxrDpoRPRg
- 128 BuzzFeed News: Election content engagement data, accessed Oct. 5, 2017, https://docs.google.com/spreadsheets/d/1ysnzawW6pDGBEqbXqeYuzWa7Rx2mQUip6CXUUUk4jlk/edit#gid=399992108
- Mathew Ingram, "Hillary Clinton Blames the Russians, Facebook, and Fake News for Her Loss," Fortune, May 31, 2017, http://fortune.com/2017/05/31/clinton-fake-news/;
- Jefferson Graham, "Hillary Clinton tech has to fix fake news," USA Todαy, May 31, 2017, https://www.usatoday.com/ story/tech/talkingtech/2017/05/31/hrc-tech-has-fix-fake-news/102357904/
- Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives - Vol 31, Number 2 - Spring 2017, Stanford University, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives - Vol 31, Number 2 - Spring 2017, Stanford University, (Page 212) https://web.stanford.edu/~gentzkow/ research/fakenews.pdf
- Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives - Vol 31, Number 2 - Spring 2017, Stanford University, (Page 223) https://web.stanford.edu/~gentzkow/ research/fakenews.pdf
- James Warren, "Did fake news help elect Trump? Not likely, according to new research," Poynter, Jan. 18, 2017, https://www.poynter.org/news/did-fake-news-help-elect-trump-not-likely-according-new-research
- Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic 134 Perspectives - Vol 31, Number 2 - Spring 2017, Stanford University, (Page 232) https://web.stanford.edu/~gentzkow/ research/fakenews.pdf
- Matt Egan, "Facebook and Amazon hit \$500 billion milestone," CNN Money, July 27, 2017, http://money.cnn. com/2017/07/27/investing/facebook-amazon-500-billion-bezos-zuckerberg/index.html
- 136 Jason Schwartz, "Facebook undermines its own efforts to fight fake news," Politico, Sept. 7, 2017, http:// www.politico.com/story/2017/09/07/facebook-fake-news-social-media-242407; Mathew Ingram, "Facebook Gets Pressure From Institutional Shareholders to Fix Fake News," Fortune, June 1, 2017, http://fortune.com/2017/06/01/facebook-shareholders-fake-news-2/; Fake News Proposal, Arjuna Capital, accessed Oct. 5, 2017, http://arjuna-capital.com/ wp-content/uploads/2017/02/Fake-News-Proposal_Facebook.pdf; Kara Swisher, "Representative Adam Schiff called for Facebook to testify before Congress on Russian online interference," Recode, Sept. 17, 2017, https://www.recode. net/2017/9/17/16322606/house-intel-schiff-facebook-testify-congress-russian-interference
 - PEN America interview with Dan Gillmor, April 27, 2017 137
 - 138 PEN America interview with Dan Gillmor, April 27, 2017
- Mark Zuckerberg Facebook status update, Facebook, Dec. 15, 2016, accessed Oct. 5, 2017, https://www.facebook.com/zuck/posts/10103338789106661
- Mark Zuckerberg Facebook status update, Facebook, Dec. 15, 2016, accessed Oct. 5, 2017, https://www.facebook.com/zuck/posts/10103338789106661

- Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook, Dec. 15, 2016, https://newsroom. fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/; Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom.fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- Josh Constine, "Facebook now flags and down-ranks fake news with help from outside fact checkers," *Tech Crunch*, Dec. 15, 2016, https://techcrunch.com/2016/12/15/facebook-now-flags-and-down-ranks-fake-news-with-help-from-outside-fact-checkers/; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook, Dec. 15, 2016, https://newsroom.fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/; Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom.fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- 143 Craig Silverman, "This Survey Shows Americans Can't Agree On What Exactly 'News' Is On Facebook," *BuzzFeed News*, April 13, 2017, https://www.buzzfeed.com/craigsilverman/americans-cant-agree-on-what-news-is-on-facebook?utm_term=.yp9oodB41W#.mvaVV3180e; Ipsos Poll Data, Ipsos Public Affairs, March 28, 2017, https://www.documentcloud.org/documents/3559451-Ipsos-Buzzfeed-News-Facebook-News-Survey-Topline.html
- 144 Harvard IOP Spring 17 Poll, Harvard IOP, http://iop.harvard.edu/youth-poll/harvard-iop-spring-17-poll (Paragraph 6)
- 145 Scott Shane, "The Fake Americans Russia Created to Influence the Election," *The New York Times*, Sept. 7, 2017, https://www.nytimes.com/2017/09/07/us/politics/russia-facebook-twitter-election.html?mcubz=0; Scott Shane, "Fake Russian Facebook Accounts Bought \$100,000 in Political Ads," *The New York Times*, Sept. 6, 2017, https://www.nytimes.com/2017/09/06/technology/facebook-russian-political-ads.html; Alex Stamos, "An Update On Information Operations On Facebook," Facebook Newsroom, Sept. 6, 2017, https://newsroom.fb.com/news/2017/09/information-operations-update/
- 146 Robert Safian, "Mark Zuckerberg On Fake News, Free Speech, And What Drives Facebook," Fast Company, April 11, 2017, https://www.fastcompany.com/40397297/mark-zuckerberg-on-fake-news-free-speech-and-what-drives-facebook
- 147 Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- 148 Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- 149 Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- 150 Kia Kokalitcheva, "Mark Zuckerberg Says Fake News on Facebook Affecting the Election Is a 'Crazy Idea,'" Fortune, Nov. 11, 2016, http://fortune.com/2016/11/11/facebook-election-fake-news-mark-zuckerberg/
- See: Arjun Kharpal, "Facebook doesn't want to be the 'arbiter of the truth,' top exec Sheryl Sandberg says, amid fake news criticism," CNBC, April 24, 2017, https://www.cnbc.com/2017/04/24/facebook-fake-news-sheryl-sanberg.
- 152 See: Arjun Kharpal, "Facebook doesn't want to be the 'arbiter of the truth,' top exec Sheryl Sandberg says, amid fake news criticism," *CNBC*, April 24, 2017, https://www.cnbc.com/2017/04/24/facebook-fake-news-sheryl-sanberg. html
- 153 Facebook, Annual Report 2016, Page 9, https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_AR_2016_FINAL.pdf

- Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. 154 fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/
- Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. fb.com/news/2017/04/working-to-stop-misinformation-and-false-news/; Rob Leathern, "News Feed FYI: Addressing Cloaking So People See More Authentic Posts," Facebook Newsroom, Aug. 9, 2017, https://newsroom.fb.com/ news/2017/08/news-feed-fyi-addressing-cloaking-so-people-see-more-authentic-posts/; Satwik Shukla, "Blocking Ads from Pages that Repeatedly Share False News," Facebook Newsroom, Aug. 28, 2017, https://newsroom.fb.com/ news/2017/08/blocking-ads-from-pages-that-repeatedly-share-false-news/; Alex Stamos, "An Update On Information Operations On Facebook," Facebook Newsroom, Sept. 6, 2017, https://newsroom.fb.com/news/2017/09/ information-operations-update/
- Facebook Tips, Facebook Pages, accessed Oct. 5, 2017, https://www.facebook.com/notes/facebook/facebooktips-whats-the-difference-between-a-facebook-page-and-group/324706977130/
- Michele McLellan, "Michele's List survey of online news startups shows gains, challenges," Knight Digital Media Center, USC Annenberg, Oct. 1, 2013, http://www.knightdigitalmediacenter.org/news/2013/10/survey-results.html
- Arun Babu, Annie Liu, Jordan Zhang, "News Feed FYI: New Updates to Reduce Clickbait Headlines," Facebook Newsroom, May 17, 2017, https://newsroom.fb.com/news/2017/05/news-feed-fyi-new-updates-to-reduce-clickbait-head-
- Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. 160 fb.com/news/2017/04/working-to-stop-misinformation-and-false-; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook, Dec. 15, 2016, https://newsroom.fb.com/news/2016/12/news-feed-fyi-addressing-hoaxesand-fake-news/
- Mark Zuckerberg Facebook status update, Facebook, Dec. 15, 2016, accessed Oct. 5, 2017, https://www.face-161 book.com/zuck/posts/10103338789106661
- Jiun-Ren Lin and Shengbo Guo, "News Feed FYI: Reducing Links to Low-Quality Web Page Experiences," Facebook Newsroom, May 10, 2017, https://newsroom.fb.com/news/2017/05/reducing-links-to-low-quality-web-page-experiences/
- Jiun-Ren Lin and Shengbo Guo, "News Feed FYI: Reducing Links to Low-Quality Web Page Experiences," Facebook Newsroom, May 10, 2017, https://newsroom.fb.com/news/2017/05/reducing-links-to-low-quality-web-page-experiences/
- Jiun-Ren Lin and Shengbo Guo, "News Feed FYI: Reducing Links to Low-Quality Web Page Experiences," 164 Facebook Newsroom, May 10, 2017, https://newsroom.fb.com/news/2017/05/reducing-links-to-low-quality-web-page-experiences/
- Josh Constine, "Facebook News Feed change demotes sketchy links overshared by spammers," Tech Crunch, June 30, 2017, https://techcrunch.com/2017/06/30/facebook-spammers/
- Josh Constine, "Facebook News Feed change demotes sketchy links overshared by spammers," Tech Crunch, June 30, 2017, https://techcrunch.com/2017/06/30/facebook-spammers/; Kurt Wagner, "Facebook found a new way to identify spam and false news articles in your News Feed," Recode, June 30, 2017, https://www.recode. net/2017/6/30/15896544/facebook-fake-news-feed-algorithm-update-spam

- Kurt Wagner, "Facebook found a new way to identify spam and false news articles in your News Feed," Recode, June 30, 2017, https://www.recode.net/2017/6/30/15896544/facebook-fake-news-feed-algorithm-update-spam
- Kurt Wagner, "Facebook found a new way to identify spam and false news articles in your News Feed," Recode, June 30, 2017, https://www.recode.net/2017/6/30/15896544/facebook-fake-news-feed-algorithm-update-spam
 - 169 PEN America interview with Craig Silverman, May 10, 2017 (phone)
 - 170 PEN America interview with Craig Silverman, May 10, 2017 (phone)
- 171 Kathleen Chaykowski, "Facebook And Google Still Have A 'Fake News' Problem, Las Vegas Shooting Reveals, Forbes, Oct. 2, 2017, https://www.forbes.com/sites/kathleenchaykowski/2017/10/02/facebook-and-google-still-have-a-fake-news-problem-las-vegas-shooting-reveals/ 52bed9a07138
- Laura Sydell, "Facebook, Google Spread Misinformation About Las Vegas Shooting. What Went Wrong?," NPR, Oct. 3, 2017, http://www.npr.org/sections/alltechconsidered/2017/10/03/555320532/facebook-google-spread-misinformation-about-las-vegas-shooting-what-went-wrong; Kathleen Chaykowski, "Facebook And Google Still Have A 'Fake News' Problem, Las Vegas Shooting Reveals, Forbes, Oct. 2, 2017, https://www.forbes.com/sites/kathleenchaykowski/2017/10/02/facebook-and-google-still-have-a-fake-news-problem-las-vegas-shooting-reveals/ 52bed9a07138
- Motahhare Eslami, et al, First I "like" it, then I hide it: Folk Theories of Social Feeds, Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, Pages 2371-2382, ACM, May 7-12, 2016, http://social.cs.uiuc.edu/papers/pdfs/Eslami_FolkTheories_CHI16.pdf; Joon Ian Wong, "Facebook's news feed algorithm is so mysterious, users are developing 'folk theories' about how it works," Quartz, May 14, 2016, https://qz.com/684726/facebooks-news-feed-algorithm-is-so-mysterious-users-are-developing-folk-theories-about-how-it-works/
- Zeynep Tufekci, "The Real Bias Built In at Facebook," *The New York Times*, May 19, 2016, https://www.nytimes.com/2016/05/19/opinion/the-real-bias-built-in-at-facebook.html
- Zeynep Tufekci, "The Real Bias Built In at Facebook," *The New York Times*, May 19, 2016, https://www.nytimes.com/2016/05/19/opinion/the-real-bias-built-in-at-facebook.html
- Julia Angwin and Hannes Grassegger, "Facebook's Secret Censorship Rules Protect White Men From Hate Speech But Not Black Children," *ProPublica*, June 28, 2017, https://www.propublica.org/article/facebook-hate-speech-censorship-internal-documents-algorithms
- 177 Betsy Woodruff, "Exclusive: Facebook Silences Rohingya Reports of Ethnic Cleansing," *The Daily Beast*, Sept. 18, 2017, https://www.thedailybeast.com/exclusive-rohingya-activists-say-facebook-silences-them
- Betsy Woodruff, "Exclusive: Facebook Silences Rohingya Reports of Ethnic Cleansing," *The Daily Beast*, Sept. 18, 2017, https://www.thedailybeast.com/exclusive-rohingya-activists-say-facebook-silences-them
- John Bohannon, "Is Facebook keeping you in a political bubble?," *Science*, May 7, 2015, http://www.sciencemag.org/news/2015/05/facebook-keeping-you-political-bubble; Josh Constantine, "Facebook deflates filter bubbles by letting you follow topics, not just Pages," *Tech Crunch*, May 4, 2017, https://techcrunch.com/2017/05/04/facebook-topics-to-follow/
- John Bohannon, "Is Facebook keeping you in a political bubble?," Science, May 7, 2015, http://www.sciencemag.org/news/2015/05/facebook-keeping-you-political-bubble
- John Bohannon, "Is Facebook keeping you in a political bubble?," Science, May 7, 2015, http://www.sciencemag.org/news/2015/05/facebook-keeping-you-political-bubble
- Sara Su, "News Feed FYI: New Test With Related Articles," Facebook Newsroom, April 25, 2017, updated Aug. 3, 2017, https://newsroom.fb.com/news/2017/04/news-feed-fyi-new-test-with-related-articles/

- Sara Su, "News Feed FYI: New Test With Related Articles," Facebook Newsroom, April 25, 2017, updated Aug. 3, 2017, https://newsroom.fb.com/news/2017/04/news-feed-fyi-new-test-with-related-articles/
- Sara Su, "News Feed FYI: New Test With Related Articles," Facebook Newsroom, April 25, 2017, updated Aug. 3, 2017, https://newsroom.fb.com/news/2017/04/news-feed-fyi-new-test-with-related-articles/
- Sara Su, "News Feed FYI: New Test With Related Articles," Facebook Newsroom, April 25, 2017, updated Aug. 3, 2017, https://newsroom.fb.com/news/2017/04/news-feed-fyi-new-test-with-related-articles/
- Josh Constine, "Facebook fights fake news with links to other angles," Tech Crunch, Aug. 3, 2017, https:// techcrunch.com/2017/08/03/facebook-related-articles/
- Alex Hardiman, "Next Steps to Addressing Link Preview Modification," Facebook Media, July 18, 2017, https:// media.fb.com/2017/07/18/next-steps-to-addressing-link-preview-modification/; Josh Constine, "Facebook fights fake news spread via modified link previews," Tech Crunch, July 18, 2017, https://techcrunch.com/2017/07/18/facebook-link-preview-modification/
- Alex Hardiman, "Next Steps to Addressing Link Preview Modification," Facebook Media, July 18, 2017, https:// media.fb.com/2017/07/18/next-steps-to-addressing-link-preview-modification/; Josh Constine, "Facebook fights fake news spread via modified link previews," Tech Crunch, July 18, 2017, https://techcrunch.com/2017/07/18/facebook-link-preview-modification/
- Alex Hardiman, "Next Steps to Addressing Link Preview Modification," Facebook Media, July 18, 2017, https:// 189 media.fb.com/2017/07/18/next-steps-to-addressing-link-preview-modification/; Josh Constine, "Facebook fights fake news spread via modified link previews," Tech Crunch, July 18, 2017, https://techcrunch.com/2017/07/18/facebook-link-preview-modification/
- Alex Hardiman, "Next Steps to Addressing Link Preview Modification," Facebook Media, July 18, 2017, https:// 190 media.fb.com/2017/07/18/next-steps-to-addressing-link-preview-modification/
- Andrew Anker, "Showing Publisher Logos in Trending and Search," Facebook Media, Aug. 22, 2017, https:// media.fb.com/2017/08/22/showing-publisher-logos-in-trending-and-search/
- Andrew Anker, "Showing Publisher Logos in Trending and Search," Facebook Media, Aug. 22, 2017, https:// media.fb.com/2017/08/22/showing-publisher-logos-in-trending-and-search/
- 193 Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom.fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- See: International Fact-Checking Network fact-checkers' code of principles," Poynter, accessed Oct. 5, 2017, https://www.poynter.org/international-fact-checking-network-fact-checkers-code-principles
- International Fact-Checking Network fact-checkers' code of principles," Pounter, accessed Oct. 5, 2017, https:// www.poynter.org/international-fact-checking-network-fact-checkers-code-principles
- Amanda Hoover, "Facebook's fake news tag is here. Who is charged with flagging hoaxes?," The Christian Science Monitor, March, 6, 2017, https://www.csmonitor.com/Technology/2017/0306/Facebook-s-fake-news-tag-is-here.-Who-is-charged-with-flagging-hoaxes; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom.fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- Facebook Help Center, How do I mark a news story as false?, accessed Oct. 5, 2017, https://www.facebook. 197 com/help/572838089565953?helpref=related; Amanda Hoover, "Facebook's fake news tag is here. Who is charged with flagging hoaxes?," The Christian Science Monitor, March, 6, 2017, https://www.csmonitor.com/Technology/2017/0306/ Facebook-s-fake-news-tag-is-here.-Who-is-charged-with-flagging-hoaxes

- 198 PEN America interview with Lori Robertson, April 26, 2017 (phone)
- 199 PEN America interview with Lori Robertson, April 26, 2017 (phone)
- 200 PEN America interview with Lori Robertson, April 26, 2017 (phone)
- 201 PEN America interview with Eugene Kiely, Aug. 18, 2017 (email exchange)
- PEN America interview with Lori Robertson, April 26, 2017 (phone); Casey Newton, "Facebook partners with fact-checking organizations to begin flagging fake news," *The Verge*, Dec. 15, 2016, https://www.theverge.com/2016/12/15/13960062/facebook-fact-check-partnerships-fake-news; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom.fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- Casey Newton, "Facebook partners with fact-checking organizations to begin flagging fake news," *The Verge*, Dec. 15, 2016, https://www.theverge.com/2016/12/15/13960062/facebook-fact-check-partnerships-fake-news; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom. fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- Casey Newton, "Facebook partners with fact-checking organizations to begin flagging fake news," *The Verge*, Dec. 15, 2016, https://www.theverge.com/2016/12/15/13960062/facebook-fact-check-partnerships-fake-news; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom. fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- Casey Newton, "Facebook partners with fact-checking organizations to begin flagging fake news," *The Verge*, Dec. 15, 2016, https://www.theverge.com/2016/12/15/13960062/facebook-fact-check-partnerships-fake-news; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom. fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- Casey Newton, "Facebook partners with fact-checking organizations to begin flagging fake news," *The Verge*, Dec. 15, 2016, https://www.theverge.com/2016/12/15/13960062/facebook-fact-check-partnerships-fake-news; Adam Mosseri, "News Feed FYI: Addressing Hoaxes and Fake News," Facebook Newsroom, Dec. 15, 2016, https://newsroom. fb.com/news/2016/12/news-feed-fyi-addressing-hoaxes-and-fake-news/
- Mark Zuckerberg Facebook status update, Facebook, Dec. 15, 2016, accessed Oct. 5, 2017, https://www.facebook.com/zuck/posts/10103338789106661
 - 208 PEN America interview with Eugene Kiely, Aug. 18, 2017 (email exchange)
- 209 Rachel Sandler, "It's hurt my wallet' How one fake news publisher is faring after Facebook crackdown," USA Today, Aug. 2, 2017, https://www.usatoday.com/story/tech/2017/08/02/its-hurt-my-wallet-how-one-fake-news-publisher-faring-after-facebook-crackdown/486720001/
 - 210 PEN America interview with Eugene Kiely, Aug. 18, 2017 (email exchange)
- Rachel Sandler, "'It's hurt my wallet' How one fake news publisher is faring after Facebook crackdown," *USA Todαy*, Aug. 2, 2017, https://www.usatoday.com/story/tech/2017/08/02/its-hurt-my-wallet-how-one-fake-news-publisher-faring-after-facebook-crackdown/486720001/
- Rachel Sandler, "It's hurt my wallet' How one fake news publisher is faring after Facebook crackdown," *USA Todαy*, Aug. 2, 2017, https://www.usatoday.com/story/tech/2017/08/02/its-hurt-my-wallet-how-one-fake-news-publisher-faring-after-facebook-crackdown/486720001/

- Rachel Sandler, "It's hurt my wallet' How one fake news publisher is faring after Facebook crackdown," $USA Tod\alpha y$, Aug. 2, 2017, https://www.usatoday.com/story/tech/2017/08/02/its-hurt-my-wallet-how-one-fake-news-publisher-faring-after-facebook-crackdown/486720001/
- Rachel Sandler, "It's hurt my wallet' How one fake news publisher is faring after Facebook crackdown," *USA Todαy*, Aug. 2, 2017, https://www.usatoday.com/story/tech/2017/08/02/its-hurt-my-wallet-how-one-fake-news-publisher-faring-after-facebook-crackdown/486720001/
- Jason Schwartz, "Facebook undermines its own efforts to fight fake news," *Politico*, Sept. 7, 2017, http://www.politico.com/story/2017/09/07/facebook-fake-news-social-media-242407
 - 216 PEN America interview with Hany Farid, Sept. 26 2017 (email exchange)
 - 217 PEN America interview with Hany Farid, Sept. 26 2017 (email exchange)
 - 218 PEN America interview with Eugene Kiely, Aug. 18, 2017 (email exchange)
 - 219 PEN America interview with Eugene Kiely, Aug. 18, 2017 (email exchange)
- 220 Christian Winthrop, "The Irish Slave Trade The Slaves That Time Forgot," Newport Buzz, March 7, 2017, http://www.thenewportbuzz.com/the-irish-slave-trade-the-slaves-that-time-forgot/7191; Liam Stack, "Debunking a Myth: The Irish Were Not Slaves, Too," The New York Times, March 17, 2017, https://www.nytimes.com/2017/03/17/us/irish-slaves-myth.html?mcubz=1
- 221 Snopes, "Were the Irish Slaves In America, Too?" Sept. 24, 2016, updated March 17, 2017, http://www.snopes.com/irish-slaves-early-america/
- Snopes, "Were the Irish Slaves In America, Too?" Sept. 24, 2016, updated March 17, 2017, http://www.snopes.com/irish-slaves-early-america/; Liam Stack, "Debunking a Myth: The Irish Were Not Slaves, Too," *The New York Times*, March 17, 2017, https://www.nytimes.com/2017/03/17/us/irish-slaves-myth.html?mcubz=1
- Sam Levin, "Facebook promised to tackle fake news. But the evidence shows it's not working," *The Guardian*, May 16, 2017, https://www.theguardian.com/technology/2017/may/16/facebook-fake-news-tools-not-working
- Sam Levin, "Facebook promised to tackle fake news. But the evidence shows it's not working," *The Guardian*, May 16, 2017, https://www.theguardian.com/technology/2017/may/16/facebook-fake-news-tools-not-working
- Sam Levin, "Facebook promised to tackle fake news. But the evidence shows it's not working," *The Guardian*, May 16, 2017, https://www.theguardian.com/technology/2017/may/16/facebook-fake-news-tools-not-working
 - 226 Newport Buzz, About Us, accessed Oct. 6, 2017, http://www.thenewportbuzz.com/about
 - 227 Newport Buzz, Disclaimer, accessed Oct. 10, 2017, http://www.thenewportbuzz.com/disclaimer
- Opinion, "Facebook's Fake Fix for Fake News," *The Wall Street Journal*, Dec. 18, 2016, https://www.wsj.com/articles/facebooks-fake-fix-for-fake-news-1481932361
- Opinion, "Facebook's Fake Fix for Fake News," *The Wall Street Journal*, Dec. 18, 2016, https://www.wsj.com/articles/facebooks-fake-fix-for-fake-news-1481932361
- 230 Heather Timmons, "Facebook's latest solution to its fake news problem—sign on a right-wing fact-checker," Quartz, Oct 7., 2017, https://qz.com/1095509/facebooks-latest-solution-to-its-fake-news-problem-sign-on-a-right-wing-fact-checker/

- 231 Opinion, "Facebook's Fake Fix for Fake News," The Wall Street Journal, Dec. 18, 2016, https://www.wsj.com/articles/facebooks-fake-fix-for-fake-news-1481932361
- 232 Facebook Journalism Project, Facebook Media, accessed Oct. 6, 2017, https://www.facebook.com/facebook-media/get-started/facebook-journalism-project
- Jasper Jackson, "Facebook to offer users tips on spotting fake news," *The Guardian*, April 6, 2017, https://www.theguardian.com/technology/2017/apr/06/facebook-to-offer-users-tips-on-spotting-fake-news
- 234 Campbell Brown, "Introducing the News Integrity Initiative," Facebook Media, April 2, 2017, https://media.fb.com/2017/04/02/introducing-the-news-integrity-initiative/
- 235 CUNY J-School Staff, "Announcing the News Integrity Initiative to Increase Trust in Journalism," City University of New York Journalism School, April 3, 2017, https://www.journalism.cuny.edu/2017/04/announcing-the-new-integrity-initiative/
- 236 Adam Mosseri, "Working to Stop Misinformation and Fake News," Facebook, April 6, 2017, https://newsroom. fb.com/news/2017/04/working-to-stop-misinformation-and-false-
- Jason Schwartz, "Facebook undermines its own efforts to fight fake news," *Politico*, Sept. 7, 2017, http://www.politico.com/story/2017/09/07/facebook-fake-news-social-media-242407
- 238 Kathleen Chaykowski, "Facebook And Google Still Have A 'Fake News' Problem, Las Vegas Shooting Reveals, Forbes, Oct. 2, 2017, https://www.forbes.com/sites/kathleenchaykowski/2017/10/02/facebook-and-google-still-have-a-fake-news-problem-las-vegas-shooting-reveals/ 52bed9a07138
- 239 Jiun-Ren Lin and Shengbo Guo, "News Feed FYI: Reducing Links to Low-Quality Web Page Experiences," Facebook Newsroom, May 10, 2017, https://newsroom.fb.com/news/2017/05/reducing-links-to-low-quality-web-page-experiences/
- 240 Michael Nunes, "Former Facebook Workers: We Routinely Suppressed Conservative News," *Gizmodo*, May 9, 2016, http://gizmodo.com/former-facebook-workers-we-routinely-suppressed-conser-1775461006
- Justin Osofsky, "Information About Trending Topics," Facebook Newsroom, May 12, 2016, https://newsroom. fb.com/news/2016/05/information-about-trending-topics/
- Joon Ian Wong, Dave Gershgorn, Mike Murphy, "Facebook is trying to get rid of bias in Trending news by getting rid of humans," Quαrtz, Aug. 26, 2016, https://qz.com/768122/facebook-fires-human-editors-moves-to-algorithm-for-trending-topics/
- Joon lan Wong, Dave Gershgorn, Mike Murphy, "Facebook is trying to get rid of bias in Trending news by getting rid of humans," Quartz, Aug. 26, 2016, https://qz.com/768122/facebook-fires-human-editors-moves-to-algorithm-for-trending-topics/
- Joon Ian Wong, Dave Gershgorn, Mike Murphy, "Facebook is trying to get rid of bias in Trending news by getting rid of humans," Quartz, Aug. 26, 2016, https://qz.com/768122/facebook-fires-human-editors-moves-to-algorithm-for-trending-topics/
- 245 Elliot Schrage, "Introducing Hard Questions," Facebook Newsroom, June 15, 2017, https://newsroom.fb.com/news/2017/06/hard-questions/
- 246 Elliot Schrage, "Introducing Hard Questions," Facebook Newsroom, June 15, 2017, https://newsroom.fb.com/news/2017/06/hard-questions/

- Facebook Newsroom, Hard Questions, accessed Oct. 6, 2017, https://newsroom.fb.com/news/category/ 247 hard-questions/
- Facebook Newsroom, Hard Questions, accessed Oct. 6, 2017, https://newsroom.fb.com/news/category/ 248 hard-questions/
- Kara Swisher and Kurt Wagner, "Facebook has hired former NYT public consultant in a 'transparency' effort," 249 Recode, Aug. 25, https://www.recode.net/2017/8/25/16202992/facebook-taps-former-nyt-public-editor-transparency-effort
- Kara Swisher and Kurt Wagner, "Facebook has hired former NYT public consultant in a 'transparency' effort," 250 Recode, Aug. 25, https://www.recode.net/2017/8/25/16202992/facebook-taps-former-nyt-public-editor-transparency-effort
- Fabio Chiusi, "Facebook's Mosseri on 'false' news: declining, hard to measure and bad for business," Poynter, April 9, 2017, https://www.poynter.org/news/facebooks-mosseri-false-news-declining-hard-measure-and-bad-business; Talk by Adam Mosseri, YouTube, posted April 7, 2017, https://www.youtube.com/watch?v=kuXmXjP88Lc.
- 252 Jason Schwartz, "Facebook undermines its own efforts to fight fake news," Politico, Sept. 7, 2017, http://www. politico.com/story/2017/09/07/facebook-fake-news-social-media-242407
- Jason Schwartz, "Facebook undermines its own efforts to fight fake news," Politico, Sept. 7, 2017, http://www. 253 politico.com/story/2017/09/07/facebook-fake-news-social-media-242407
- Jason Schwartz, "Facebook undermines its own efforts to fight fake news," Politico, Sept. 7, 2017, http://www. politico.com/story/2017/09/07/facebook-fake-news-social-media-242407
 - 255 PEN America interview with Alexios Mantzarlis, April 21, 2017 (phone)
 - 256 PEN America interview with Alexios Mantzarlis, April 21, 2017 (phone)
- Jason Schwartz, "Facebook undermines its own efforts to fight fake news," Politico, Sept. 7, 2017, http://www. politico.com/story/2017/09/07/facebook-fake-news-social-media-242407
- 258 Gordon Pennycook and David Rand, Assessing the Effect of 'Disputed' Warnings and Source Salience on Perceptions of Fake News Accuracy, Sept. 15, 2017, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3035384; Jason Schwartz, "Tagging fake news on Facebook doesn't work, study says," Politico, Sept. 11, 2017, http://www.politico.com/ story/2017/09/11/facebook-fake-news-fact-checks-242567
- 259 Jason Schwartz, "Tagging fake news on Facebook doesn't work, study says," Politico, Sept. 11, 2017, http:// www.politico.com/story/2017/09/11/facebook-fake-news-fact-checks-242567; Gordon Pennycook and David Rand, Assessing the Effect of 'Disputed' Warnings and Source Salience on Perceptions of Fake News Accuracy, Sept. 15, 2017, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3035384
- Jason Schwartz, "Tagging fake news on Facebook doesn't work, study says," Politico, Sept. 11, 2017, http:// www.politico.com/story/2017/09/11/facebook-fake-news-fact-checks-242567
- Jason Schwartz, "Tagging fake news on Facebook doesn't work, study says," Politico, Sept. 11, 2017, http:// www.politico.com/story/2017/09/11/facebook-fake-news-fact-checks-242567
- Jason Schwartz, "Tagging fake news on Facebook doesn't work, study says," Politico, Sept. 11, 2017, http:// www.politico.com/story/2017/09/11/facebook-fake-news-fact-checks-242567

- 263 Chris Strohm, "Mueller Probe Has 'Red-Hot' Focus on Social Media, Officials Say, *Bloomberg*, Sept. 13, 2017, https://www.bloomberg.com/news/articles/2017-09-13/mueller-probe-is-said-to-have-red-hot-focus-on-social-media; Tony Romm, "Facebook and Twitter will testify to the U.S. Congress on Russia and the 2016 presidential election," *Recode*, Oct. 4, 2017, https://www.recode.net/2017/10/4/16424514/facebook-google-twitter-testify-house-senate-intelligence-committee-congress-russia-investigation
- 264 Adrian Chen, "The Agency," *The New York Times*, June 2, 2015, https://www.nytimes.com/2015/06/07/mag-azine/the-agency.html?mcubz=0; Alexey Kovalev, "Russia's Infamous 'Troll Factory' Is Now Posing as a Media Empire," *The Moscow Times*, March 24, 2017, https://themoscowtimes.com/articles/russias-infamous-troll-factory-is-now-posing-as-a-media-empire-57534
- 265 Adrian Chen, "The Agency," *The New York Times*, June 2, 2015, https://www.nytimes.com/2015/06/07/mag-azine/the-agency.html?mcubz=0
- 266 Adrian Chen, "The Agency," *The New York Times*, June 2, 2015, https://www.nytimes.com/2015/06/07/mag-azine/the-agency.html?mcubz=0
- 267 Adrian Chen, "The Agency," *The New York Times*, June 2, 2015, https://www.nytimes.com/2015/06/07/mag-azine/the-agency.html?mcubz=0
- 268 Adrian Chen, "The Agency," The New York Times, June 2, 2015, https://www.nytimes.com/2015/06/07/magazine/the-agency.html?mcubz=0; Background to "Assessing Russian Activities and Intentions in Recent US Elections": The Analytic Process and Cyber Incident Attribution, Office of the Director of National Intelligence, Jan. 6, 2017, Page 4 of report, https://www.dni.gov/files/documents/ICA_2017_01.pdf
- 269 Colin Stretch, "Facebook to Provide Congress With Ads Linked to Internet Research Agency," Facebook Newsroom, Sept. 21, 2017, https://newsroom.fb.com/news/2017/09/providing-congress-with-ads-linked-to-internet-research-agency/
- Jen Weedon, William Nuland and Alex Stamos, *Information Operations and Facebook*, Facebook Newsroom, April 27, 2017, https://fbnewsroomus.files.wordpress.com/2017/04/facebook-and-information-operations-v1.pdf
- Jen Weedon, William Nuland and Alex Stamos, *Information Operations and Facebook*, Facebook Newsroom, April 27, 2017, (Page 10-11) https://fbnewsroomus.files.wordpress.com/2017/04/facebook-and-information-operations-v1. pdf
- Jen Weedon, William Nuland and Alex Stamos, *Information Operations and Facebook*, Facebook Newsroom, April 27, 2017, (Page 11) https://fbnewsroomus.files.wordpress.com/2017/04/facebook-and-information-operations-v1.pdf
 - 273 PEN America interview with Claire Wardle, May 5, 2017 (phone)
- Laura Hazard Owen, "Republicans seem more susceptible to fake news than Democrats (but liberals, don't feel too comfy yet), *Nieman Lab*, May 5, 2017, http://www.niemanlab.org/2017/05/republicans-seem-more-susceptible-to-fake-news-than-democrats-but-liberals-dont-feel-too-comfy-yet/
- Jen Weedon, William Nuland and Alex Stamos, *Information Operations and Facebook*, Facebook Newsroom, April 27, 2017, (Page 11) https://fbnewsroomus.files.wordpress.com/2017/04/facebook-and-information-operations-v1.pdf
- 276 Alex Stamos, "An Update On Information Operations On Facebook," Facebook Newsroom, Sept. 6, 2017, https://newsroom.fb.com/news/2017/09/information-operations-update/
- 277 Alex Stamos, "An Update On Information Operations On Facebook," Facebook Newsroom, Sept. 6, 2017, https://newsroom.fb.com/news/2017/09/information-operations-update/

- Tom LoBianco, "Hill investigators, Trump staff look to Facebook for critical answers in Russia probe, CNN Politics, July 20, 2017, http://www.cnn.com/2017/07/20/politics/facebook-russia-investigation-senate-intelligence-committee/index.html
- Jeremy Herb, "Warner: Facebook's Russia disclosure 'tip of the iceberg,' CNN Politics, Sept. 7, 2017, http://www.cnn.com/2017/09/07/politics/warner-facebook-russia-hacking/index.html?iid=EL
- 280 Michael Isikoff, "Under fire, Facebook refuses to disclose political ads bought by Russian trolls," *Yαhoo!* News, Sept. 7, 2017, https://www.yahoo.com/news/fire-facebook-refuses-disclose-political-ads-bought-rus-sian-trolls-230143492.html
- 281 Michael Isikoff, "Under fire, Facebook refuses to disclose political ads bought by Russian trolls," *Yαhoo!* News, Sept. 7, 2017, https://www.yahoo.com/news/fire-facebook-refuses-disclose-political-ads-bought-russian-trolls-230143492.html
- Casey Newton, "Why we can't trust Facebook's story about Russian ads," *The Verge*, Sept. 8, 2017, https://www.theverge.com/2017/9/8/16277144/facebook-russian-ads-political-explainer-credibility
- FCC press release: FCC Expands Online Public File Requirement To Move Cable, Radio, And Satellite Public Files Online, Federal Communication Commission, Jan. 28, 2016, http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0128/DOC-337474A1.pdf; Craig Silverman, "Facebook's Russian Ads Disclosure Is Putting The Company Under Intense New Scrutiny," BuzzFeed News, Sept. 7, 2017, https://www.buzzfeed.com/craigsilverman/facebooksrussian-ads-disclosure-opens-a-new-front-that?utm_term=.hewqmrvxV#.dwjmGDgJa
- 284 Scott Shane and Mike Isaac, "Facebook to Turn Over Russian-Linked Ads to Congress," *The New York Times*, Sept. 21, 2017, https://www.nytimes.com/2017/09/21/technology/facebook-russian-ads.html?mcubz=0; Mark Zuckerberg Facebook Post, Facebook, Sept. 21, 2017, https://www.facebook.com/zuck/posts/10104052907253171
- 285 Mark Zuckerberg Facebook Post, Facebook, Sept. 21, 2017, https://www.facebook.com/zuck/posts/10104052907253171
- Brian Stelter, "Facebook is planning big changes to political ads on its site. Are they enough?" CNN Mediα, Sept. 21, 2017, http://money.cnn.com/2017/09/21/media/facebook-political-ads/index.html?iid=EL
- Joel Kaplan, "Improving Enforcement and Transparency of Ads on Facebook," Facebook Newsroom, Oct. 2, 2017, https://newsroom.fb.com/news/2017/10/improving-enforcement-and-transparency/
- Joel Kaplan, "Improving Enforcement and Transparency of Ads on Facebook," Facebook Newsroom, Oct. 2, 2017, https://newsroom.fb.com/news/2017/10/improving-enforcement-and-transparency/
- 289 Allison Brennan, "Microtargeting: How campaigns know you better than you know yourself," CNN, Nov. 5, 2012, http://www.cnn.com/2012/11/05/politics/voters-microtargeting/index.html
- 290 Allison Brennan, "Microtargeting: How campaigns know you better than you know yourself," CNN, Nov. 5, 2012, http://www.cnn.com/2012/11/05/politics/voters-microtargeting/index.html; Meta S. Brown, "Big Data Analytics And The Next President: How Microtargeting Drives Today's Campaigns, Forbes, May 29, 2016, https://www.forbes.com/sites/metabrown/2016/05/29/big-data-analytics-and-the-next-president-how-microtargeting-drives-todays-campaigns/#1cbfd-9f26c42
- 291 Hal Conick, "How Social Media, Microtargeting and Big Data Revolutionized Political Marketing," American Marketing Association, Sept. 26, 2016, https://www.ama.org/publications/MarketingNews/Pages/social-media-big-data-microtargeting-revolutionized-political-marketing.aspx

- 292 Nicholas Confessore and Danny Hakim, "Data Firm Says 'Secret Sauce' Aided Trump; Many Scoff," *The New York Times*, March 6, 2017, https://www.nytimes.com/2017/03/06/us/politics/cambridge-analytica.html
 - 293 https://scout.ai/story/the-rise-of-the-weaponized-ai-propaganda-machine
- Scott Shane, "Purged Facebook Page Tied to the Kremlin Spread Anti-Immigrant Bile," *The New York Times*, Sept. 12, 2017, https://www.nytimes.com/2017/09/12/us/politics/russia-facebook-election.html?hp&action=click&pg-type=Homepage&clickSource=story-heading&module=second-column-region®ion=top-news&WT.nav=top-news&r=0
- 295 Scott Shane, "Purged Facebook Page Tied to the Kremlin Spread Anti-Immigrant Bile," *The New York Times*, Sept. 12, 2017, https://www.nytimes.com/2017/09/12/us/politics/russia-facebook-election.html?hp&action=click&pg-type=Homepage&clickSource=story-heading&module=second-column-region®ion=top-news&WT.nav=top-news&_r=0
- 296 Kate Brannen, "Connecting the Dots: Political Microtargeting and the Russia Investigation" *Just Security*, May 19, 2017, https://www.justsecurity.org/41199/connecting-dots-political-microtargeting-russia-investigation-cambridge-analytica/
- 297 David Auerbach, "You Are What You Click: On Microtargeting," *The Nation*, Feb. 13, 2013, https://www.then-ation.com/article/you-are-what-you-click-microtargeting/; Brice Bay, "Advertising on Facebook with "Microtargeting" and Content that Connects," Enveritas Group, Feb. 17, 2017, https://enveritasgroup.com/campfire/advertising-facebook-microtargeting-content-connects/
- 298 Lori Andrews, "Facebook Is Using You," *The New York Times*, Feb. 4, 2012, http://www.nytimes.com/2012/02/05/opinion/sunday/facebook-is-using-you.html?mcubz=0; Facebook, Annual Report 2016, Page 9, https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_AR_2016_FINAL.pdf
- 299 Alex York, "Shedding Light on Facebook Dark Posts," Sprout Social, May 10, 2016, https://sproutsocial.com/insights/facebook-dark-posts/; Marty Swant, "Facebook Will Soon Let Brands Target Ads at Entire Families or Specific People Within Households," Adweek, June 27, 2017, http://www.adweek.com/digital/facebook-will-soon-let-brands-target-ads-at-entire-families-or-specific-people-within-households/
- See: Unpublished Page Post, Facebook Business, accessed Oct. 6, 2017, https://www.facebook.com/business/help/835452799843730; Joel Winston, "How the Trump Campaign Built an Identity Database and Used Facebook Ads to Win the Election," *Medium*, Nov. 18, 2016, https://medium.com/startup-grind/how-the-trump-campaign-built-anidentity-database-and-used-facebook-ads-to-win-the-election-4ff7d24269ac; John Jantsch, "Why Dark Posts Are the Best Facebook Advertising Approach Right Now," Duct Tape Marketing, https://www.ducttapemarketing.com/facebook-dark-posts/
- "Still Pending! Final Election 2016 Numbers: Trump Won Both Popular (62.9 M-62.2 M) and Electoral College Votes (306-232)... Update: Trump Says Subtract 3 Million Illegal Votes from Hillary!," 70News.com, Nov.12, 2016, 70news. wordpress.com/2016/11/12/final-election-2016-numbers-trump-won-both-popular-62-9-m-62-7-m-and-electoral-college-vote-306-232-hey-change-org-scrap-your-loony-petition-now/
- 302 Philip Bump, "Google's top news link for 'final election results' goes to a fake news site with false numbers," The Washington Post, Nov.14, 2016, www.washingtonpost.com/news/the-fix/wp/2016/11/14/googles-top-news-link-for-final-election-results-goes-to-a-fake-news-site-with-false-numbers/?utm_term=.b2feef729daf
- Jonathan Taplin, "Google Doesn't Want What's Best for Us," *The New York Times*, Aug. 12, 2017, www.nytimes. com/2017/08/12/opinion/sunday/google-tech-diversity-memo.html?mcubz=1; Jonathan Taplin, *Move Fast and Break Things: How Facebook*, Google, and Amazon Cornered Culture and Undermined Democracy, Little, Brown and Company, April 18, 2017, print.
- 304 How Search algorithms work, Google, accessed Sept. 29, 2017, www.google.com/search/howsearchworks/algorithms/

- 305 About Google News, Google, accessed Sept. 29, 2017, www.google.com/intl/en_us/about_google_news.html
- 306 Discover how easy it is to use Adsense, Google, accessed Sept. 29, 2017, www.google.com/adsense/start/how-it-works/ /
- Megan Garber, "Google News at 10: How the Algorithm Won Over the News Industry," *The Atlantic*, Sept. 20, 2012, www.theatlantic.com/technology/archive/2012/09/google-news-at-10-how-the-algorithm-won-over-the-news-industry/262641/; Frederic Filloux, "Google News: the secret sauce," *The Guardian*, Feb. 25, 2013, www.theguardian.com/technology/2013/feb/25/1
- 308 Megan Garber, "'Ads by Google': A Billion-Dollar Brainstorm Turns 10," *The Atlantic*, June 18, 2013, www.the-atlantic.com/technology/archive/2013/06/ads-by-google-a-billion-dollar-brainstorm-turns-10/276987/
- 309 Eric Rosenberg, "The Business of Google," *Investopedia*, Aug. 5, 2016, www.investopedia.com/articles/investing/020515/business-google.asp

In 2015, 23% of Google's ad revenue came from AdSense, for revenue of \$15 billion. Google makes the majority of its ad revenue from Google AdWords, Google's proprietary advertising service, which generates a lot of revenue from Google's own websites, including Gmail.

- 310 Google Corporate, Code of Conduct, internet archive, web.archive.org/web/20100419172019/investor.google.com/corporate/code-of-conduct.html
- Jii Daisuke Wakabayashi and Mike Isaac, "In Race Against Fake News, Google and Facebook Stroll to the Starting Line," *The New York Times*, Jan. 25, 2017, www.nytimes.com/2017/01/25/technology/google-facebook-fake-news.html?_r=1
 - 312 About Google News, Google, www.google.com/intl/en_us/about_google_news.html
- Discover how easy it is to use AdSense, Google, www.google.com/adsense/start/how-it-works/ /; Megan Garber, "'Ads by Google': A Billion-Dollar Brainstorm Turns 10," *The Atlantic*, June 18, 2013, www.theatlantic.com/technology/archive/2013/06/ads-by-google-a-billion-dollar-brainstorm-turns-10/276987/ {Last year, AdSense shared \$7 billion with more than 2 million publishers)
 - Find a domain, create a site, and get custom e-mail, Google, domains.google/ /
- Desktop Search Engine Market Share, Net Market Share, Sept. 2017, www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=0; Mobile Search Engine Market Share, Net Market Share, Sept. 2017, www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=1
- Desktop Search Engine Market Share, Net Market Share, Sept. 2017, www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=0; Mobile Search Engine Market Share, Net Market Share, Sept. 2017, www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=1
- Google Search Statistics, Internet Live Stats, accessed Sept. 30, 2017, www.internetlivestats.com/google-search-statistics/; Danny Sullivan, "Google now handles at least 2 trillion searches per year," Search Engine Land, May 24, 2016, searchengineland.com/google-now-handles-2-999-trillion-searches-per-year-250247
- Danny Sullivan, "Google now handles at least 2 trillion searches per year," Search Engine Land, May 24, 2016, searchengineland.com/google-now-handles-2-999-trillion-searches-per-year-250247
- Vivek Wadhwa, "What Google and Facebook must do about one of their biggest problems," The Washington Post, April 12, 2017, https://www.washingtonpost.com/news/innovations/wp/2017/04/12/what-google-and-facebook-must-do-about-one-of-their-biggest-problems/?utm_term=.3db785938aee; Carole Cadwalladr, "Google, democracy and the truth about internet search," The Guardian, Dec. 4, 2016, www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook;

- 320 How Search works, Google, accessed Sept. 29, 2017, www.google.com/search/howsearchworks/
- 321 "8 major Google ranking signals in 2017," by SEO PowerSuite (sponsored content), Search Engine Land, July 11, 2017, searchengineland.com/8-major-google-ranking-signals-2017-278450
 - 322 How Search algorithms work, Google, www.google.com/search/howsearchworks/algorithms/
- 323 "8 major Google ranking signals in 2017," by SEO PowerSuite (sponsored content), Search Engine Land, July 11, 2017, searchengineland.com/8-major-google-ranking-signals-2017-278450
- James Parsons, "Why Germany is So Desperate to Uncover Google's Search Algorithm," *AudienceBloom*, Oct. 10, 2014, www.audiencebloom.com/germany-desperate-uncover-googles-search-algorithm/; Jonathan Strickland, "The Google Search Engine," *How Stuff Works*, computer.howstuffworks.com/internet/basics/google1.htm
- 325 Google Search Statistics, Internet Live Stats, accessed Sept. 30, 2017, www.internetlivestats.com/google-search-statistics/
- Michael Hodgdon, "Value of Organic First-Page Results," Infront Webworks (digital marketing company), June 17, 2015, www.infront.com/blogs/the-infront-blog/2015/6/17/value-of-first-page-google-results; Dave Chaffey, "Comparison of Google clickthrough rates by position," Smart Insights (digital marketing company), Sept. 29, 2016, www. smartinsights.com/search-engine-optimisation-seo/seo-analytics/comparison-of-google-clickthrough-rates-by-position/
- 327 Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- 328 Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
 - 329 PEN America interview with Google spokesperson, May 5, 2017 (phone)
 - 330 PEN America interview with Google spokesperson, May 5, 2017 (phone)
- Danny Sullivan, "Google's 'One True Answer' problem-when featured snippets go bad," Search Engine Land, March 5, 2017, searchengineland.com/googles-one-true-answer-problem-featured-snippets-270549
- Danny Sullivan, "Google's 'One True Answer' problem-when featured snippets go bad," Search Engine Land, March 5, 2017, searchengineland.com/googles-one-true-answer-problem-featured-snippets-270549
- Barry Schwartz, "According To Google, Barack Obama Is King Of The United States," Search Engine Land, Nov. 25, 2014, searchengineland.com/according-google-barack-obama-king-united-states-209733
- 334 Carole Cadwalladr, "Google, democracy and the truth about internet search," *The Guardian*, Dec. 4, 2016, www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook
- Adrianne Jeffries, "Google's Featured Snippets are Worse Than Fake News," *The Outline*, March 5, 2017, theoutline.com/post/1192/google-s-featured-snippets-are-worse-than-fake-news
- 336 Adrianne Jeffries, "Google's Featured Snippets are Worse Than Fake News," *The Outline*, March 5, 2017, theoutline.com/post/1192/google-s-featured-snippets-are-worse-than-fake-news
- 337 Google search results, accessed Sept. 30, 2017, www.google.com/search?q=Who+is+the+first+black+president%3F&rlz=1C5MACD_enUS503US503&oq=who+&aqs=chrome.0.69i59j69i60j69i59j69i65l3.926j0j4&sourceid=chrome&ie=UTF-8; "The Seven Black Presidents Before Obama, Fookem and Bug (blog), Dec. 1, 2008, fookembug. wordpress.com/2008/12/01/the-seven-black-presidents-before-barack-obama/

- 338 Gianluca Mezzofiore, "Google Algorithm Fail Puts 4Chan's Wrongly Named Vegas Gunman on Top of Search," Mashable, Oct. 2, 2017, mashable.com/2017/10/02/google-algorithm-fail-las-vegas-gunman-fake-news/#YiXmo8qNbOqU.
- 339 Gianluca Mezzofiore, "Google Algorithm Fail Puts 4Chan's Wrongly Named Vegas Gunman on Top of Search," Mashable, Oct. 2, 2017, mashable.com/2017/10/02/google-algorithm-fail-las-vegas-gunman-fake-news/#YiXmo8qNbOqU.
- Abby Ohlheiser, "How far-right trolls named the wrong man as the Las Vegas shooter," *The Washington Post*, Oct. 2, 2017, http://www.washingtonpost.com/news/the-intersect/wp/2017/10/02/how-far-right-trolls-named-the-wrong-man-as-the-las-vegas-shooter/?tid=pm_lifestyle_pop&utm_term=.fofc631d07ea
- Danny Sullivan, "How Google Instant's Autocomplete Suggestions Work," Search Engine Land, April 6, 2011, searchengineland.com/how-google-instant-autocomplete-suggestions-work-62592
- Samuel Gibbs, Google alters search autocomplete to remove 'are Jews evil' question," *The Guardian*, Dec. 5, 2016, www.theguardian.com/technology/2016/dec/05/google-alters-search-autocomplete-remove-are-jews-evil-suggestion; Carole Cadwalladr, "Google, democracy and the truth about internet search," *The Guardian*, Dec. 4, 2016, www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook
- Samuel Gibbs, Google alters search autocomplete to remove 'are Jews evil' question," *The Guardian*, Dec. 5, 2016, www.theguardian.com/technology/2016/dec/05/google-alters-search-autocomplete-remove-are-jews-evil-suggestion; Carole Cadwalladr, "Google, democracy and the truth about internet search," *The Guardian*, Dec. 4, 2016, www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook
- Rowaida Abdelaziz, "Google Search Is Doing Irreparable Harm To Muslims," *HuffPost*, June 29, 2017, www. huffingtonpost.com/entry/google-search-harming-muslims_us_59415359e4bod31854867de8
- Rowaida Abdelaziz, "Google Search Is Doing Irreparable Harm To Muslims," *HuffPost*, June 29, 2017, www. huffingtonpost.com/entry/google-search-harming-muslims_us_59415359e4bod31854867de8
- Rowaida Abdelaziz, "Google Search Is Doing Irreparable Harm To Muslims," *HuffPost*, June 29, 2017, www. huffingtonpost.com/entry/google-search-harming-muslims_us_59415359e4bod31854867de8
- 347 Adrianne Jeffries, "Google's Featured Snippets are Worse Than Fake News," *The Outline*, March 5, 2017, https://theoutline.com/post/1192/google-s-featured-snippets-are-worse-than-fake-news
- 348 Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- 349 Content farms are companies that have large numbers of employees that create content or drive clicks simply to push sites up the search results rankings. Google search and search engine spam, Google, Jan. 21, 2011, googleblog. blogspot.com/2011/01/google-search-and-search-engine-spam.html
- 350 Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/

- Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- Danny Sullivan, "Google launches new effort to flag upsetting or offensive content in search," Search Engine Land, March 14, 2017, searchengineland.com/google-flag-upsetting-offensive-content-271119
- 356 Danny Sullivan, "Google launches new effort to flag upsetting or offensive content in search," Search Engine Land, March 14, 2017, searchengineland.com/google-flag-upsetting-offensive-content-271119
- 357 Barb Darrow, "Google Deploys Content Cops on Fake News," Fortune, March 16, 2017, fortune.com/2017/03/16/google-fake-news/.; Jessica Guynn, "Google starts flagging offensive content in search results," USA Todαy, March 16, 2017, www.usatoday.com/story/tech/news/2017/03/16/google-flags-offensive-content-search-results/99235548/;
- 358 Danny Sullivan, "Google launches new effort to flag upsetting or offensive content in search," Search Engine Land, March 14, 2017, searchengineland.com/google-flag-upsetting-offensive-content-271119
- See: Alex Hern, "Google tells army of 'quality raters' to flag Holocaust denial,' *The Guardian*, March 15, 2017, fortunedotcom.files.wordpress.com/2016/12/holocaust-result.png; "Example results provided to quality raters in Google's manual," *The Guardian*, March 15, 2017, www.theguardian.com/technology/2017/mar/15/google-quality-raters-flag-holocaust-denial-fake-news
- 360 Google, "Example results provided to quality raters in Google's manual," *The Guardian*, March 15, 2017, www. theguardian.com/technology/2017/mar/15/google-quality-raters-flag-holocaust-denial-fake-news#img-2 (photograph)
- 361 Google search results, accessed Sept. 30, 2017, www.google.com/search?q=Did+the+Holocaust+happen%3F&rlz=1C5MACD_enUS503US503&ei=Jcq-Wf7KCMfxmQHniY_AAQ&start=50&sa=N&biw=1280&bih=617 "The Holocaust Hoax: IT NEVER Happened," from a neo-Nazi website ExpeltheParasite.com was included on page 7 of the results.
- 362 Eric Siu, "24 Eye-Popping SEO Statistics," SearchEngineJournal, April 19, 2012, www.searchenginejournal. com/24-eye-popping-seo-statistics/42665/
- 363 Ben Gomes, "Our latest quality improvements for Search," Google, April 25, 2017, www.blog.google/products/search/our-latest-quality-improvements-search/
- Deepa Seetharaman, Jack Nicas, and Lukas I. Alpert, "Fake Content Puts Pressure on Facebook, Google," *The Wall Street Journal*, Nov. 15, 2016, www.wsj.com/articles/fake-content-puts-pressure-on-facebook-google-1479257191; James Titcomb, "Google overhauls search algorithm in bid to fight fake news," *The Telegraph*, April 25, 2017, www. telegraph.co.uk/technology/2017/04/25/google-overhauls-search-algorithm-bid-fight-fake-news/
 - 365 PEN America interview with Brendan Nyhan, April 6, 2017 (email exchange)
 - 366 PEN America interview with Brendan Nyhan, April 6, 2017 (email exchange)
- CBC News, "Students learn to spot fake news with Google-funded school project," CBC News, Sept. 20, 2017, www.cbc.ca/news/canada/kitchener-waterloo/google-canada-invests-half-million-to-teach-students-to-spot-fake-news-1.4298004; Daniel Leblanc, "Google, Facebook to unveil campaigns against 'fake news," The Globe αnd Mail, Sept. 19, 2017, beta.theglobeandmail.com/news/politics/google-facebook-to-unveil-campaigns-against-fake-news/article36294615/?ref=www.theglobeandmail.com&

- Darren Davidson, "Google's Gingras: fake news in US election was catalyst for change," *The Australian*, Sept. 25, 2017,www.theaustralian.com.au/business/media/googles-gingras-fake-news-in-us-election-was-catalyst-for-change/news-story/247a40fa7e344421a1234fab46b99528; Sydney Ember, "Google Updates Policy on News Pay Walls. 'First Click Free' to End," *The New York Times*, Oct. 2, 2017, www.nytimes.com/2017/10/02/business/media/google-subscriptions-publishers.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=second-column-region®ion=top-news&WT.nav=top-news
- 369 Darren Davidson, "Google's Gingras: fake news in US election was catalyst for change," *The Australian*, Sept. 25, 2017,www.theaustralian.com.au/business/media/googles-gingras-fake-news-in-us-election-was-catalyst-for-change/news-story/247a40fa7e344421a1234fab46b99528
- 370 Sydney Ember, "Google Updates Policy on News Pay Walls. 'First Click Free' to End," *The New York Times*, Oct. 2, 2017, www.nytimes.com/2017/10/02/business/media/google-subscriptions-publishers.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=second-column-region®ion=top-news&WT.nav=top-news
- "Discover how easy it is to use Adsense," Google, www.google.com/adsense/start/how-it-works/#/; www. lifewire.com/adsense-explained-1616692
- "Discover how easy it is to use Adsense," Google, www.google.com/adsense/start/how-it-works/#/; www. lifewire.com/adsense-explained-1616692
- 373 Eric Rosenberg, "The Business of Google," *Investopedia*, August 5, 2016, www.investopedia.com/articles/investing/020515/business-google.asp
- 374 Megan Garber, "Ads by Google': A Billion-Dollar Brainstorm Turns 10," *The Atlantic*, June 18, 2013, www.theatlantic.com/technology/archive/2013/06/ads-by-google-a-billion-dollar-brainstorm-turns-10/276987/ Last year, AdSense shared \$7 billion with more than 2 million publishers
- Sapna Maheshwari, "Advertising's Moral Struggle: Is Online Reach Worth the Hurt?" *The New York Times*, Dec. 26, 2016, www.nytimes.com/2016/12/26/business/media/advertising-online-ads-fake-news-google.html?mtrref=undefined
- Sapna Maheshwari, "Advertising's Moral Struggle: Is Online Reach Worth the Hurt?" *The New York Times*, Dec.26, 2016, www.nytimes.com/2016/12/26/business/media/advertising-online-ads-fake-news-google.html?mtrref=undefined; Sapna Maheshwari, "Brands Try to Blacklist Breitbart, but Ads Slip Through Anyway," *The New York Times*, March 26, 2017, www.nytimes.com/2017/03/26/business/media/breitbart-advertising-blacklist.html?mcubz=0&mtrref=undefined
- 377 Andrew Higgins, Mike McIntire and Gabriel J.X. Dance, "Inside a Fake News Sausage Factory: 'This Is All About Income,'" *The New York Times*, Nov. 25, 2016, www.nytimes.com/2016/11/25/world/europe/fake-news-donald-trump-hillary-clinton-georgia.html?mcubz=0
 - 378 PEN America interview with Craig Silverman, May 10, 2017 (phone)
- 379 Samanth Subramanian, "Inside the Macedonian Fake-news Complex," *WIRED*, Feb. 15, 2017, www.wired. com/2017/02/veles-macedonia-fake-news/
- 380 Samanth Subramanian, "Inside the Macedonian Fake-news Complex," WIRED, Feb. 15, 2017, www.wired. com/2017/02/veles-macedonia-fake-news/
- 381 Samanth Subramanian, "Inside the Macedonian Fake-news Complex," WIRED, Feb. 15, 2017, www.wired. com/2017/02/veles-macedonia-fake-news/
- 382 Samanth Subramanian, "Inside the Macedonian Fake-news Complex," WIRED, Feb. 15, 2017, www.wired. com/2017/02/veles-macedonia-fake-news/

- Isa Soares and Florence Davey-Attlee, "The Fake News Machine: Inside A Town Gearing Up For 2020," CNN, Sept.13, 2017, money.cnn.com/interactive/media/the-macedonia-story/
- Associated Press, "Google to ban fake news sites from its advertising network," Los Angeles Times, Nov. 14, 2016, www.latimes.com/business/technology/la-fi-tn-google-fake-news-20161114-story.html
- 385 Associated Press, "Google to ban fake news sites from its advertising network," Los Angeles Times, Nov. 14, 2016, www.latimes.com/business/technology/la-fi-tn-google-fake-news-20161114-story.html
- 386 AdSense program policies: Prohibited content, Google, Nov. 2016, support.google.com/adsense/answer/1348688?hl=en#Misrepresentative_content
- 387 AdSense program policies: Prohibited content, Google, Nov. 2016, support.google.com/adsense/answer/1348688?hl=en#Misrepresentative_content; Google: News Help, What does each label (i.e. Blog) mean?, Satire, support.google.com/news/publisher/answer/4582731#satire
- 388 Scott Spencer, "How we fought bad ads, sites and scammers in 2016," Google, Jan.25, 2017, www.blog.google/topics/ads/how-we-fought-bad-ads-sites-and-scammers-2016/
 - Samanth Subramanian, "Inside the Macedonian Fake-news Complex," Wired, Feb. 15, 2017, www.wired.com/2017/02/veles-macedonia-fake-news/
- 390 see, usapolitics.co, accessed Sept. 30, 2017; See "Trump Criticized Obama for Golfing. Now He Spends Weekends on the Links," USA Politics, http://usapolitics.co/2017/02/trump-criticized-obama-golfing-now-spends-weekends-links/
 - 391 see politicshall.com, cccessed Sept. 30, 2017
- 392 Isa Soares and Florence Davey-Attlee, "The Fake News Machine: Inside A Town Gearing Up For 2020," CNN, Sept.13, 2017, money.cnn.com/interactive/media/the-macedonia-story/
- 393 Craig Silverman, "In Spite Of The Crackdown, Fake News Publishers Are Still Earning Money From Major Ad Networks," *BuzzFeed*, April 4, 2017, www.buzzfeed.com/craigsilverman/fake-news-real-ads?utm_term=.jeAMmZV5v#. eoZENqJQR
- 394 Craig Silverman, "In Spite Of The Crackdown, Fake News Publishers Are Still Earning Money From Major Ad Networks," *BuzzFeed*, April 4, 2017, www.buzzfeed.com/craigsilverman/fake-news-real-ads?utm_term=.jeAMmZV5v#. eoZENqJQR
- 395 Craig Silverman, "In Spite Of The Crackdown, Fake News Publishers Are Still Earning Money From Major Ad Networks," *BuzzFeed*, April 4, 2017, www.buzzfeed.com/craigsilverman/fake-news-real-ads?utm_term=.jeAMmZV5v#. eoZENqJQR
- 396 Craig Silverman, "In Spite Of The Crackdown, Fake News Publishers Are Still Earning Money From Major Ad Networks," *BuzzFeed*, April 4, 2017, www.buzzfeed.com/craigsilverman/fake-news-real-ads?utm_term=.jeAMmZV5v#. eoZENqJQR
 - 397 PEN America interview with Craig Silverman, May 10, 2017 (phone)
 - 398 PEN America interview with Craig Silverman, May 10, 2017 (phone)
- 399 Richard Gingas, "Labeling fact-check articles in Google News," Google, Oct. 13, 2016, www.blog.google/topics/journalism-news/labeling-fact-check-articles-google-news/

- 400 Richard Gingas, "Labeling fact-check articles in Google News," Google, Oct. 13, 2016, www.blog.google/topics/journalism-news/labeling-fact-check-articles-google-news/
- Justin Kosslyn and Cong Yu, "Fact Check now available in Google Search and News around the world," Google, April 7, 2017, www.blog.google/products/search/fact-check-now-available-google-search-and-news-around-world/
- 402 Matt Burgess, "Google News has been given a makeover to help it tackle fake news," Wired, June 28, 2017, www.wired.co.uk/article/google-news-redesign
- Jonathan Vanian, "Google News Redesign Is Easier to Read With More Fact-Checking," Fortune, June 28, 2017, fortune.com/2017/06/28/google-news-fact-checking/; Greg Sterling, "Google News gets a cleaner look, new features to make it 'more accessible," Search Engine Land, June 27, 2017, searchengineland.com/google-news-gets-cleaner-look-new-features-make-accessible-277533
 - 404 see: news.google.com/
 - 405 PEN America Interview with Google spokesperson, May 5, 2017 (phone)
 - 406 PEN America Interview with Google spokesperson, May 5, 2017 (phone)
- 407 Google: News Help, What does each label (i.e. Blog) mean?, Fact-checking, accessed Oct. 1, 2017 support. google.com/news/publisher/answer/4582731#fact-checking
- 408 Adnan Farooqui, "Bing Fact Check Labels Now Visible In Search Results," *Ubergizmo*, Sept. 17, 2017, www. ubergizmo.com/2017/09/bing-fact-check-labels-in-search-results/; Jacob Kastrenakes, "Bing now shows fact checks in search results," *The Verge*, Sept. 16, 2017, www.theverge.com/2017/9/16/16318924/bing-fact-check-label-added-search-results
 - 409 see: www.sharethefacts.org
- 410 Erica Anderson, "Making it easier for publishers to share fact check content," Google, June 6, 2017, www.blog. google/topics/journalism-news/making-it-easier-publishers-share-fact-check-content/
 - 411 Share the Facts, accessed Oct. 1, 2017, www.sharethefacts.org; see: www.sharethefacts.org/embed;
 - Share the Facts, accessed Oct. 1, 2017, www.sharethefacts.org
 - Share the Facts, accessed Oct. 1, 2017, www.sharethefacts.org/share
 - 414 E-mail communication with Erica Ryan, project manager for Share the Facts, on Sept. 22, 2017.
- 415 Image, Share the Facts, accessed Oct. 9, 2017, https://static1.squarespace.com/static/571fcf-d2044262a0b4714533/t/5727fc0d8a65e2a723f07a51/1462238233191/30.png?format=1000w static1.squarespace.com/static/571fcfd2044262a0b4714533/t/5727fc0d8a65e2a723f07a51/1462238233191/30.png?format=1000w
- Frederic Lardinois, "Google's fact check feature goes global and comes to Google Search," *Tech Crunch*, April 7, 2017, techcrunch.com/2017/04/07/fact-check-the-world-is-flat/
- Justin Kosslyn and Cong Yu, "Fact Check now available in Google Search and News around the world," Google, April 7, 2017, www.blog.google/products/search/fact-check-now-available-google-search-and-news-around-world/
- Justin Kosslyn and Cong Yu, "Fact Check now available in Google Search and News around the world," Google, April 7, 2017, www.blog.google/products/search/fact-check-now-available-google-search-and-news-around-world/

- 419 Snopes Staff, "Google Adds Fact-Check Info to Search Results," Snopes, April 7, 2017, www.snopes. com/2017/04/07/google-fact-check-tags/
- Heidi Moore, "How can you do fact-checking if no one agrees on what a fact is?," *The Washington Post*, Nov. 4, 2016, www.washingtonpost.com/opinions/how-can-you-do-fact-checking-if-no-one-agrees-on-what-a-fact-is/2016/11/04/7c62753e-9608-11e6-bb29-bf2701dbe0a3_story.html?utm_term=.ac0452819a22
 - 421 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
 - 422 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
- Desktop Search Engine Market Share, Net Market Share, Sept. 2017, www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=0; Mobile Search Engine Market Share, Net Market Share, Sept. 2017, www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=1
- 424 Aliza Rosen and Ikuhiro Ihara, "Giving you more characters to express yourself," Twitter Blog, Product, Sept. 26. 2017, https://blog.twitter.com/official/en_us/topics/product/2017/Giving-you-more-characters-to-express-yourself. html
- 425 Ian Schwartz, "Trump: I Wouldn't Be Here If It Wasn't For Twitter," "I Have My Own Form Of Media," *ReαlClear Politics*, March 15, 2017, https://www.realclearpolitics.com/video/2017/03/15/trump_i_wouldnt_be_here_if_it_wasnt_for_twitter_i_have_my_own_form_of_media.html
- 426 @realDonaldTrump Tweet, Twitter, July 31, 2016, https://twitter.com/realDonaldTrump/status/759743648573435905?ref_src=twsrc%5Etfw&ref_url=http%3A%2F%2Fwww.trumptwitterarchive.com%2F
- 427 Adrian Chen, "The Fake-News Fallacy," *The New Yorker*, Sept. 4, 2017, https://www.newyorker.com/maga-zine/2017/09/04/the-fake-news-fallacy
- Julie Hirschfeld Davis and Helene Cooper, "Trump Says Transgender People Will Not Be Allows in the Military," *The New York Times*, July 26, 2017, https://www.nytimes.com/2017/07/26/us/politics/trump-transgender-military. html?mcubz=1&_r=0; Jeremy Diamond, "Trump to reinstate US military ban on transgender people," *CNN*, July 27, 2017, http://edition.cnn.com/2017/07/26/politics/trump-military-transgender/index.html
- 429 Chris Cillizza, "Donald Trump's chilling escalation of his war with the media," CNN, Oct. 5, 2017, http://edition.cnn.com/2017/10/05/politics/donald-trump-media-war/index.html; Trump Twitter Archive, Fake News!, accessed Oct. 7, 2017, http://www.trumptwitterarchive.com/fakenews!
- 430 Two Center For Digital Journalism, Platforms and Publishers: A Definitive Timeline, http://tow.cjr.org/platform-timeline/ /?s=asc&f=platform&v=Twitter; Michael Arrington, "Odeo Releases Twttr," *Tech Crunch*, July 15, 2006, https://techcrunch.com/2006/07/15/is-twttr-interesting/
- Number of monthly active Twitter users worldwide from 1st quarter 2010 to 2nd quarter 2017 (in millions), Statista, accessed Oct. 7, 2017, https://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/; Twitter Announces Second Quarter Results, Twitter, Inc. July 27, 2017, http://files.shareholder.com/downloads/AMDA-2F526X/4861728019x0x951003/11DEB964-E7A5-43F8-96E2-D074A947255B/TWTR_Q2_17_Earnings_Press_Release.pdf
 - 432 Facebook, Company Info, Stats, accessed Oct. 5, 2017, https://newsroom.fb.com/company-info/
- 433 Ethan Zuckerman, "The First Twitter Revolution?" Foreign Policy, Jan. 15, 2011, http://foreignpolicy.com/2011/01/15/the-first-twitter-revolution-2/

- 434 Kurt Wagner, "Twitter added zero users last quarter," Recode, Jul. 27, 2017, https://www.recode.net/2017/7/27/16049084/twitter-jack-dorsey-q2-earnings-2017; Angela Moon, "Twitter shares tumble as user growth stalls," Reuters, July 27, 2017, https://www.reuters.com/article/us-twitter-results/twitter-shares-tumble-as-user-growth-stalls-idUSKBN1AC1NJ
- 435 Social Media Fact Sheet, Pew Research Center, Jan. 12, 2017, http://www.pewinternet.org/fact-sheet/social-media/
- 436 Sara Fischer, Axios Media Trends, Sept. 12, 2017, (5. Exclusive: Facebook, Twitter, Reddit top for news consumption), https://www.axios.com/axios-media-trends-2483928218.html
- Sara Fischer, Axios Media Trends, Sept. 12, 2017, (5. Exclusive: Facebook, Twitter, Reddit top for news consumption) https://www.axios.com/axios-media-trends-2483928218.html
- Elisa Shearer and Jeffrey Gottfried, "News Use Across Social Media Platforms 2017," Pew Research Center, Sept. 7, 2017, http://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/
- 439 Farhad Manjoo, "How Twitter Is Being Gamed to Feed Misinformation," *The New York Times*, May 31, 2017, https://www.nytimes.com/2017/05/31/technology/how-twitter-is-being-gamed-to-feed-misinformation.html?mcubz=1
- Farhad Manjoo, "How Twitter Is Being Gamed to Feed Misinformation," *The New York Times*, May 31, 2017, https://www.nytimes.com/2017/05/31/technology/how-twitter-is-being-gamed-to-feed-misinformation.html?mcubz=1
- Farhad Manjoo, "How Twitter Is Being Gamed to Feed Misinformation," *The New York Times*, May 31, 2017, https://www.nytimes.com/2017/05/31/technology/how-twitter-is-being-gamed-to-feed-misinformation.html?mcubz=1
- Zyenep Tufekci, Algorithmic Harms Beyond Facebook and Google: Emergent Challenges of Computational Agency, Colorado Technology Law Journal, Vol. 13, June 2015, (Pg. 213-215) http://ctlj.colorado.edu/wp-content/up-loads/2015/08/Tufekci-final.pdf; "Press Freedom Under Fire in Ferguson," PEN America, Oct. 26, 2014, https://pen.org/press-freedom-under-fire-in-ferguson/
- Justin Osofsky and Todd Gage, "Community Support FYI: Improving the Names Process on Facebook," Facebook Newsroom, Dec. 15, 2015, https://newsroom.fb.com/news/2015/12/community-support-fyi-improving-the-names-process-on-facebook/
- Requests to verify an account, Twitter Help Center, accessed Oct. 7, 2017, https://support.twitter.com/articles/20174631
- Facebook Data Policy, accessed Oct. 7, 2017, https://www.facebook.com/policy.php (Facebook may enter into an agreement with a partner regarding data use, and the partner is bound by Facebook's Data Policy.)
- "What Type Of Data Can You Get From Twitter?," Bright Planet, March 15, 2016, https://brightplanet.com/2016/03/what-type-of-data-you-can-get-from-twitter/; Klint Finley, "Twitter Opens Its Enormous Archives To Data-Hungry Academics," WIRED, Feb. 6, 2014, https://www.wired.com/2014/02/twitter-promises-share-secrets-academia/; Where to get Twitter data for academic research, George Washington University, Social Feed Manager, accessed Oct. 7, 2017, https://gwu-libraries.github.io/sfm-ui/posts/2017-09-14-twitter-data
- Combating Fake News: An Agenda for Research and Action, Shorenstein Center on Media, Politics and Public Policy, May 2, 2017, https://shorensteincenter.org/combating-fake-news-agenda-for-research/ (Twitter provides APIs [application program interfaces] that make public data available, but sharing agreements are needed to collect high-volume data samples. Additionally, Facebook would require custom APIs. With more accessible data for research purposes, academics can help platforms design more useful and informative tools for social news consumption.)

- Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- 450 Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- Twitter Public Policy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- Colin Crowell, "Our Approach to Bots & Misinformation," Twitter Blog, June 14, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Our-Approach-Bots-Misinformation.html
- 456 Colin Crowell, "Our Approach to Bots & Misinformation," Twitter Blog, June 14, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Our-Approach-Bots-Misinformation.html
- 457 Farhad Manjoo, "How Twitter Is Being Gamed to Feed Misinformation," *The New York Times*, May 31, 2017, https://www.nytimes.com/2017/05/31/technology/how-twitter-is-being-gamed-to-feed-misinformation.html?mcubz=1&_r=0
- Adelyn Zhou, "6 Ways Bots Are Positively Changing the World," Forbes, Feb. 16, 2017, https://www.forbes.com/sites/adelynzhou/2017/02/16/see-six-ways-bots-are-positively-changing-the-world/ 1f8b78767cO7; John Biggs, "Researchers find that Twitter bots can be used for good," *Tech Crunch*, Sept. 25, 2017, https://techcrunch.com/2017/09/25/researchers-find-that-twitter-bots-can-be-used-for-good/;
- John Biggs, "Researchers find that Twitter bots can be used for good," *Tech Crunch*, Sept. 25, 2017, https://techcrunch.com/2017/09/25/researchers-find-that-twitter-bots-can-be-used-for-good/; April Glaser, "Twitter bots are being weaponized to spread information on the French presidential campaign hack," *Recode*, May 6, 2017, https://www.recode.net/2017/5/6/15568582/twitter-bots-macron-french-presidential-candidates-hacked-emails
- 460 Alessandro Bessi and Emilio Ferrara, Social bots distort the 2016 U.S. presidential election online discussion, First Monday, Vol. 21, Number 11 Nov. 7, 2016, http://firstmonday.org/ojs/index.php/fm/article/view/7090/5653 p2
- 461 Chad Edwards, et al., Is that a bot running the social media feed? Testing the differences in perceptions of communication quality for a human agent and a bot agent on Twitter, Computers in Human Behavior, Vol. 33, April 2014, Pages 372-376, http://www.sciencedirect.com/science/article/pii/S0747563213003129?via=ihub

- Onur Varol, et al. Online Human-Bot Interactions: Detection, Estimation, and Characterization, March 27, 2017, https://arxiv.org/pdf/1703.03107.pdf
- 463 About replies and mentions, Twitter Help Center, accessed Oct. 8, 2017, https://support.twitter.com/articles/14023
- Onur Varol, et al. Online Human-Bot Interactions: Detection, Estimation, and Characterization, March 27, 2017, https://arxiv.org/pdf/1703.03107.pdf
 - Twitter Audit, @cnn, updated three months prior, accessed Oct. 8, 2017, https://www.twitteraudit.com/CNN
- 466 Twitter Audit, @foxnews, updated three months prior, accessed Oct. 8, 2017, https://www.twitteraudit.com/foxnews
- 467 Twitter Audit, @realdonaldtrump, updated Oct. 6, 2017, accessed Oct. 7, 2017, https://www.twitteraudit.com/realdonaldtrump
- "How to spot a Twitter bot: 10 easy ways to recognize fake accounts," BotOrNot Blog, accessed Oct. 8, 2017, http://botornot.co/blog/index.php/how-to-spot-a-twitter-bot-10-easy-ways-to-recognize-fake-accounts/
- 469 Clayton A. Davis, et al., BotOrNot: A System to Evaluate Social Bots, Proceedings of the 25th International Conference Companion on World Wide Web, Feb.2, 2106, https://arxiv.org/abs/1602.00975
- 470 Marc Fisher, John Woodrow Cox and Peter Hermann, "Pizzagate: From rumor, to hashtag, to gunfire in D.C." The Washington Post, Dec. 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=.a1d5b598b521
- David Weigel, "The Seth Rich conspiracy shows how fake news still works," *The Washington Post*, May 20, 2017, https://www.washingtonpost.com/news/the-fix/wp/2017/05/20/the-seth-rich-conspiracy-shows-how-fake-news-still-works/?utm_term=.4b9d84077bb5; https://www.nytimes.com/2017/05/31/technology/how-twitter-is-being-gamed-to-feed-misinformation.html?mcubz=1
- Allison Graves, "Fact-check: Did 3 million undocumented immigrants vote in this year's election?," *PolitiFact*, Nov. 18, 2016, http://www.politifact.com/punditfact/statements/2016/nov/18/blog-posting/no-3-million-undocumented-immigrants-did-not-vote-/; Rowan Walrath, "Takeaways from Harvard's Fake News Conference," *Storybench*, March 8, 2017, http://www.storybench.org/takeaways-from-harvards-fake-news-conference/; Molly Callahan, "The Fake News Phenomenon: How It Spreads, And How To Fight It," *Northeastern*, Feb. 21, 2017
- Rowan Walrath, "Takeaways from Harvard's Fake News Conference," Storybench, March 8, 2017, http://www.storybench.org/takeaways-from-harvards-fake-news-conference/; Molly Callahan, "The Fake News Phenomenon: How It Spreads, And How To Fight It," Northeastern, Feb. 21, 2017, http://news.northeastern.edu/2017/02/the-fake-news-phenomenon-how-it-spreads-and-how-to-fight-it/; Abby Phillip and Mike DeBonis, "Without evidence, Trump tells lawmakers 3 million to 5 million illegal ballots cost him the popular vote," The Washington Post, Jan 23., 2017, https://www.washingtonpost.com/news/post-politics/wp/2017/01/23/at-white-house-trump-tells-congressional-leaders-3-5-million-illegal-ballots-cost-him-the-popular-vote/?utm_term=.a7a855d88b39
- Rowan Walrath, "Takeaways from Harvard's Fake News Conference," Storybench, March 8, 2017, http://www.storybench.org/takeaways-from-harvards-fake-news-conference/; Molly Callahan, "The Fake News Phenomenon: How It Spreads, And How To Fight It," Northeαstern, Feb. 21, 2017, http://news.northeastern.edu/2017/02/the-fake-news-phenomenon-how-it-spreads-and-how-to-fight-it/
 - PEN America interview with David Lazer, Oct. 8, 2017 (email exchange)
- Rowan Walrath, "Takeaways from Harvard's Fake News Conference," Storybench, March 8, 2017, http://www.storybench.org/takeaways-from-harvards-fake-news-conference/

- 477 Combating Fake News: An Agenda for Research and Action, Shorenstein Center on Media, Politics and Public Policy, May 2, 2017, https://shorensteincenter.org/combating-fake-news-agenda-for-research/
- 478 Molly Callahan, "The Fake News Phenomenon: How It Spreads, And How To Fight It," *Northeastern*, Feb. 21, 2017, http://news.northeastern.edu/2017/02/the-fake-news-phenomenon-how-it-spreads-and-how-to-fight-it/; Abby Phillip and Mike DeBonis, "Without evidence, Trump tells lawmakers 3 million to 5 million illegal ballots cost him the popular vote," *The Washington Post*, Jan 23., 2017, https://www.washingtonpost.com/news/post-politics/wp/2017/01/23/at-white-house-trump-tells-congressional-leaders-3-5-million-illegal-ballots-cost-him-the-popular-vote/?utm_term=.a7a855d88b39
- 479 Background to "Assessing Russian Activities and Intentions in Recent US Elections": The Analytic Process and Cyber Incident Attribution, Office of the Director of National Intelligence, Jan. 6, 2017, Pages 2-4 of report, https://www.dni.gov/files/documents/ICA_2017_01.pdf
- Scott Shane, "The Fake Americans Russia Created to Influence the Election," *The New York Times*, Sept. 7, 2017, https://www.nytimes.com/2017/09/07/us/politics/russia-facebook-twitter-election.html?mcubz=1&_r=0
- 481 Scott Shane, "The Fake Americans Russia Created to Influence the Election," *The New York Times*, Sept. 7, 2017, https://www.nytimes.com/2017/09/07/us/politics/russia-facebook-twitter-election.html?mcubz=1&_r=0
- Scott Shane, "The Fake Americans Russia Created to Influence the Election," *The New York Times*, Sept. 7, 2017, https://www.nytimes.com/2017/09/07/us/politics/russia-facebook-twitter-election.html?mcubz=1&_r=0
- Scott Shane, "The Fake Americans Russia Created to Influence the Election," *The New York Times*, Sept. 7, 2017, https://www.nytimes.com/2017/09/07/us/politics/russia-facebook-twitter-election.html?mcubz=1&_r=0
- Chris Strohm, "Mueller Probe Has 'Red-Hot' Focus on Social Media, Officials Say, *Bloomberg*, Sept. 13, 2017, https://www.bloomberg.com/news/articles/2017-09-13/mueller-probe-is-said-to-have-red-hot-focus-on-social-media
- 485 Tony Romm, "Facebook and Twitter will testify to the U.S. Congress on Russia and the 2016 presidential election," Recode, Oct. 4, 2017, https://www.recode.net/2017/10/4/16424514/facebook-google-twitter-testify-house-senate-intelligence-committee-congress-russia-investigation
- 486 Colin Crowell, "Our Approach to Bots & Misinformation," Twitter Blog, June 14, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Our-Approach-Bots-Misinformation.html
- Twitter PublicPolicy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- 488 Twitter PublicPolicy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- 489 Twitter PublicPolicy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- 490 Colin Crowell, "Our Approach to Bots & Misinformation," Twitter Blog, June 14, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Our-Approach-Bots-Misinformation.html
- 491 Colin Crowell, "Our Approach to Bots & Misinformation," Twitter Blog, June 14, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Our-Approach-Bots-Misinformation.html

- Twitter PublicPolicy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html
- "Fighting abuse to protect freedom of expression," Twitter Blog, Dec. 29, 2015, https://blog.twitter.com/official/ 493 en_us/a/2015/fighting-abuse-to-protect-freedom-of-expression.html
- Charlie Warzel, "Twitter Permanently Suspends Conservative Writer Milo Yiannopoulos," BuzzFeed News, July 19, 2016, https://www.buzzfeed.com/charliewarzel/twitter-just-permanently-suspended-conservative-writer-milo?utm_term=.vIDYWpddm - .eoMy5K77v
- Twitter PublicPolicy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html

Twitter PublicPolicy, "Update: Russian Interference in 2016 US Election, Bots, & Misinformation," Twitter Blog, Sept. 28, 2017, https://blog.twitter.com/official/en_us/topics/company/2017/Update-Russian-Interference-in-2016--Election-Bots-and-Misinformation.html

- AJ Vicens, "Twitter Has a Serious Problem And It's A Bigger Deal Than People Realize," Mother Jones, April 14, 2017, http://www.motherjones.com/politics/2017/04/what-twitter-going-do-about-disinformation-campaigns/
- AJ Vicens, "Twitter Has a Serious Problem And It's A Bigger Deal Than People Realize," Mother Jones, April 497 14, 2017, http://www.motherjones.com/politics/2017/04/what-twitter-going-do-about-disinformation-campaigns/
- SPJ Code of Ethics, Society of Professional Journalists, accessed Oct. 4, 2017, https://www.spj.org/ethicscode. 498 asp
- Kathleen M. Schmitt, Albert C. Gunther, and Janice L. Liebhart, "Why Partisans See Mass Media as Biased," Communication Research, Dec. 1, 2004, journals.sagepub.com/doi/abs/10.1177/0093650204269390
- David Jackson, "Trump again calls media 'enemy of the people," USA Τοdαy, Feb. 24, 2017, www.usatoday. 500 com/story/news/politics/2017/02/24/donald-trump-cpac-media-enemy-of-the-people/98347970/
- Kyle Pope, "CJR Editor addresses Congress," Columbia Journalism Review, July 24, 2017, www.cjr.org/covering_trump/cjr-editor-addresses-congress.php
- Fox News Poll for February 11-13, Fox News, Feb. 17, 2017, static.politico.com/39/51/79db278d40d1a48e50747d-74b48a/170217-fox-news-media-poll.pdf
- Jonathan Easley, "Poll: Majority says mainstream media publishes fake news," The Hill, May 24, 2017, thehill. com/homenews/campaign/334897-poll-majority-says-mainstream-media-publishes-fake-news
 - 504 2017 Edelman Trust Barometer, Edelman, accessed Oct. 4, 2017, https://www.edelman.com/trust2017/
- 505 Richard Edelman, "An Implosion of Trust," Edelman, Jan. 15, 2017, https://www.edelman.com/p/6-a-m/an-implosion-of-trust/
- Matthew Ingram, "Most Trump Supporters Don't Trust the Media Anymore," Fortune, Feb. 1, 2017, fortune. com/2017/02/01/trump-voters-media-trust/
- Kyle Pope, "CJR Editor addresses Congress," Columbia Journalism Review, Jul. 24, 2017, www.cjr.org/covering_trump/cir-editor-addresses-congress.php
- Jessica Lawlor, "New Muck Rack survey: 72% of journalists say they are optimistic about the future," Muck Rack, May 31, 2017, muckrack.com/daily/2017/05/31/annual-journalist-survey-2017/

- 509 PEN America interview with Claire Wardle, May 5, 2017 (phone)
- John Daniszewski phone interview with PEN America, Oct. 3, 2017
- 511 Sean Davis, "After Decrying Fake News, Journalists Are Binging On Fake News," *The Federalist*, Jan. 23, 2017, thefederalist.com/2017/01/23/mainstream-media-still-binging-fake-news/
- 512 Nancy Gibbs, "A Note to Our Readers," *Time*, Jan. 24, 2017, time.com/4645541/donald-trump-white-house-oval-office/
- Nancy Gibbs, "A Note to Our Readers," *Time*, Jan. 24, 2017, http://time.com/4645541/donald-trump-white-house-oval-office/
- 514 "Correction: EPA-Dow Chemical Story," *The Associated Press*, Jul. 3, 2017, apnews.com/2350d7be5e-24469ab445089bf663cdcb
- 515 "Correction: EPA-Dow Chemical Story," *The Associated Press*, Jul. 3, 2017, apnews.com/feb0fb4603a04b2c-ba91a02f2c682edb
 - John Daniszewski phone interview with PEN America, Oct. 3, 2017
- Jonathan Easley, "Media errors give Trump fresh ammunition," *The Hill*, Jul. 4, 2017, thehill.com/homenews/media/340564-media-errors-fuel-trump-attacks
- Matthew Boyle, "The Associated Press Cracks, Issues Correction Undermining Hit Piece from Leftist Activist Hired To Sneak Into Kellyanne Conway Event," *Breitbart*, May 24, 2017, www.breitbart.com/big-government/2017/05/24/the-associated-press-cracks-issues-correction-undermining-hit-piece-from-leftist-activist-hired-to-sneak-into-kellyanne-conway-event/
- 519 Erik Wemple, "New Hampshire freelancer trashed as 'ideologically rotten' for report on Kellyanne Conway event," *The Washington Post*, May 24, 2017, www.washingtonpost.com/blogs/erik-wemple/wp/2017/05/24/new-hampshire-freelancer-trashed-as-ideologically-rotten-for-report-on-kellyanne-conway-event/?utm_term=.85fdf478e055
- 520 Matthew Boyle, "Very Fake News: CNN Pushes Refurbished Russia Conspiracy, Inaccurately Claims Investment Fund Under Investigation," *Breitbαrt*, Jun. 23, 2017, www.breitbart.com/big-government/2017/06/23/very-fake-news-cnn-pushes-refurbished-russia-conspiracy-inaccurately-claims-investment-fund-under-investigation/
 - 521 Editor's Note, CNN politics, Jun. 23, 2017, www.cnn.com/2017/06/23/politics/editors-note/index.html
- 522 Sydney Ember and Michael M. Grynbaum, "At CNN, Retracted Story Leaves an Elite Reporting Team Bruised," *The New York Times*, Sept. 5, 2017, www.nytimes.com/2017/09/05/business/media/cnn-retraction-trump-scaramucci. html?mcubz=3
- 523 Erik Wemple, "Three CNN employees resign over retracted story on Russia ties," *The Washington Post*, Jun. 26, 2017, www.washingtonpost.com/blogs/erik-wemple/wp/2017/06/26/three-cnn-employees-resign-over-retracted-story-on-russia-ties/?utm_term=.548c961f8ebe
- 524 Joseph Bernstein, "Here's How Breitbart And Milo Smuggled Nazi And White Nationalist Ideas Into The Mainstream," BuzzFeed, Oct. 5, 2017, https://www.buzzfeed.com/josephbernstein/heres-how-breitbart-and-milo-smuggled-white-nationalism?utm_term=.emYqAE000#.yxxEQpook
- Joe Concha, "CNN producer on new O'Keefe video: Voters are 'stupid,' Trump is 'crazy,'" The Hill, Jun. 30, 2017, http://thehill.com/homenews/media/340210-cnn-producer-on-new-okeefe-video-voters-are-stupid-crazy

- Paul Farhi, "What the latest James O'Keefe video leaves out," *The Washington Post*, Jun. 28, 2017, www.washingtonpost.com/lifestyle/style/what-you-dont-see-in-okeefe-video-may-be-as-important-as-what-you-do/2017/06/28/dcb67446-5b7c-11e7-a9f6-7c3296387341_story.html?utm_term=.f657df4daoc3
- Paul Farhi, "What the latest James O'Keefe video leaves out," *The Washington Post*, Jun. 28, 2017, www.washingtonpost.com/lifestyle/style/what-you-dont-see-in-okeefe-video-may-be-as-important-as-what-you-do/2017/06/28/dcb67446-5b7c-11e7-a9f6-7c3296387341_story.html?utm_term=.f657df4daoc3
 - 528 "Editor's Note," CNN politics, Jun. 23, 2017, www.cnn.com/2017/06/23/politics/editors-note/index.html
- 529 Sydney Ember and Michael M. Grynbaum, "At CNN, Retracted Story Leaves an Elite Reporting Team Bruised," *The New York Times*, Sept. 5, 2017, www.nytimes.com/2017/09/05/business/media/cnn-retraction-trump-scaramucci. html?mcubz=3
- 530 Michael M. Grynbaum, "A Costly Retraction for CNN and an Opening for Trump," *The New York Times*, Jun. 27, 2017, www.nytimes.com/2017/06/27/business/media/cnn-retracted-story-on-trump.html?mcubz=3
- 531 Sydney Ember and Michael M. Grynbaum, "At CNN, Retracted Story Leaves an Elite Reporting Team Bruised," *The New York Times*, Sept. 5, 2017, www.nytimes.com/2017/09/05/business/media/cnn-retraction-trump-scaramucci. html?mcubz=3
 - NPR ombudsman, NPR, accessed Oct. 4, 2017, www.npr.org/sections/ombudsman/
- 533 Pirongrong Ramasoota, "What is a Newspaper Ombudsman?," Institute for International Journalism in the E.W. Scripps School of Journalism at Ohio University (blog), Jul. 29, 2010, scrippsiij.blogspot.com/2010/07/what-is-newspaper-ombudsman.html
- 534 Rem Rieder, "Ombudsman role still has a place in newsroom," *USA Today*, Feb. 21, 2013, www.usatoday.com/story/money/columnist/rieder/2013/02/21/rem-rieder-ombudsmen/1934015/
- 535 Margaret Sullivan, "Nicholas Kristof Should Give Readers a Full Explanation About Somaly Man," *The New York Times*, Jun. 2, 2014, https://publiceditor.blogs.nytimes.com/2014/06/02/nicholas-kristof-should-give-readers-a-full-explanation-about-somaly-mam/
- 536 Simon Marks, "Somaly Mam: The Holy Saint (and Sinner) of Sex Trafficking," Newsweek, May 21, 2014, http://www.newsweek.com/2014/05/30/somaly-mam-holy-saint-and-sinner-sex-trafficking-251642.html
- 537 Nicholas Kristof, "When Sources May Have Lied," *The New York Times*, Jun. 7, 2014, https://kristof.blogs.nytimes.com/2014/06/07/when-sources-may-have-lied/
- 538 Margaret Sullivan, "More on Kristof, Bergdahl and Risen," *The New York Times*, Jun. 9, 2014, https://publiceditor.blogs.nytimes.com/2014/06/09/more-on-kristof-bergdahl-and-risen/
- 539 Abigail Pesta, "Somaly Mam's Story: "I Didn't Lie." Marie Claire, Sept. 16, 2014, http://www.marieclaire.com/culture/news/a6620/somalys-story/
- 540 Pirongrong Ramasoota, "What is a Newspaper Ombudsman?," Institute for International Journalism in the E.W. Scripps School of Journalism at Ohio University (blog), Jul. 29, 2010 scrippsiij.blogspot.com/2010/07/what-is-newspaper-ombudsman.html
- Jackie Spinner, "Public editors disappear as media distrust grows," Columbia Journalism Review, Jul. 20, 2017, www.cjr.org/special_report/public-editors-disappearing.php
- Hadas Gold and Joe Pompeo, "New York Times eliminates its public editor," *Politico*, May 31, 2017, www. politico.com/story/2017/05/31/new-york-times-public-editor-239000

- Lloyd Grove, "Why the New York Times Fired Its Public Editor in Favor of a 'Reader Center," The Daily Beast, May 31, 2017, www.thedailybeast.com/why-the-new-york-times-fired-its-public-editor-in-favor-of-a-reader-center
- Lloyd Grove, "Why the New York Times Fired Its Public Editor in Favor of a 'Reader Center," The Daily Beast, May 31, 2017, www.thedailybeast.com/why-the-new-york-times-fired-its-public-editor-in-favor-of-a-reader-center
- Zach Schonfeld, "The New York Times Is Eliminating The Public Editor Role—Just When It Needs It The Most," Newsweek, May 31, 2017, www.newsweek.com/new-york-times-public-editor-liz-spayd-trump-era-journalism-618454
- Daniel Victor, "New York Times Will Offer Employee Buyouts and Eliminate Public Editor Role," *The New York Times*, May 31, 2017, www.nytimes.com/2017/05/31/business/media/new-york-times-buyouts.html
- 547 Stephen J. Dubner, "How Biased Is Your Media?: A New Freakonomics Radio Podcast," *Freαkonomics*, Feb. 16, 2012, freakonomics.com/podcast/how-biased-is-your-media/
- Lars Willnat and David H. Weaver, "The American Journalist in the Digital Age: Key Findings," Indiana University, archive.news.indiana.edu/releases/iu/2014/05/2013-american-journalist-key-findings.pdf
- Hadas Gold, "Survey: 7 percent of reporters identify as Republican," *Politico*, May 6, 2014, www.politico.com/blogs/media/2014/05/survey-7-percent-of-reporters-identify-as-republican-188053
- Hannity.com Staff, "No Media Bias? A New Study Proves Otherwise," Hannity.com, no date, www.hannity.com/articles/hanpr-election-493995/no-media-bias-a-new-study-14108031/#ixzz3r23XNUoW
- 551 Joe Concha, "Liberal Media? 7% of Journalists Say They're Republicans," *The Dαily Beast*, May 7, 2014, https://www.thedailybeast.com/liberal-media-7-of-journalists-say-theyre-republicans
- Matthew Ingram, "Warren Buffett Says Most Newspapers, Including His Own, Are Doomed," Fortune, Feb. 28, 2017 fortune.com/2017/02/28/buffett-newspapers-doomed/
- Hadas Gold, "Sinclair executive defends company from 'biased' media in internal memo," *Politico*, Jul. 18, 2017, www.politico.com/blogs/on-media/2017/07/18/sinclair-head-of-news-issues-memo-defending-network-240655
- Paul Farhi, "Washington Post closes sale to Amazon founder Jeff Bezos," *The Washington Post*, Oct. 1, 2013, www.washingtonpost.com/business/economy/washington-post-closes-sale-to-amazon-founder-jeff-bezos/2013/10/01/fca3b16a-2acf-11e3-97a3-ff2758228523_story.html
- 555 Michael J. de la Merced and Nicholas Fandos, "Fox's Unfamiliar but Powerful Television Rival: Sinclair," *The New York Times*, www.nytimes.com/2017/05/03/business/dealbook/sinclair-media-expansion-fox-conservative-media. html
- 556 Lorraine Mirabella, "FCC requests additional information on Sinclair Broadcast deal to acquire Tribune Media," *The Baltimore Sun*, Sept. 19, 2017, http://www.baltimoresun.com/business/bs-bz-sinclair-broadcast-tribune-fcc-questions-20170919-story.html
- 557 Sinclair Broadcast Group, "Question of the Day," *Komonews.com*, accessed Oct. 4, 2017, http://komonews.com/news/nation-world/national-world-question-of-the-day
- Sydney Ember, "Sinclair Requires TV Stations to Air Segments That Tilt to the Right," *The New York Times*, May 12, 2017, www.nytimes.com/2017/05/12/business/media/sinclair-broadcast-komo-conservative-media.html?_r=0
- Hadas Gold, "Sinclair executive defends company from 'biased' media in internal memo," *Politico*, Jul. 18, 2017, www.politico.com/blogs/on-media/2017/07/18/sinclair-head-of-news-issues-memo-defending-network-240655

- 560 Sean Sullivan, "The politics of Jeff Bezos," *The Washington Post*, Aug. 7, 2013, www.washingtonpost.com/news/the-fix/wp/2013/08/07/the-politics-of-jeff-bezos/?utm_term=.55580b8783f1
- David A. Graham, "The Politics of New Washington Post Owner Jeff Bezos," The Atlantic, Aug. 5, 2013, www. theatlantic.com/politics/archive/2013/08/the-politics-of-new-i-washington-post-i-owner-jeff-bezos/278385/
- Allan Sloan, "A plea to learn more about Bezos's personal politics," *The Washington Post*, Aug. 15, 2013, https://www.washingtonpost.com/business/economy/a-plea-to-learn-more-about-bezoss-personal-politics/2013/08/15/27164286-05e7-11e3-a07f-49ddc7417125_story.html?utm_term=.ed119276fb32
- Ryan Chittum, "Jeff Bezos's landmark purchase of the Washington Post," Columbia Journalism Review, Aug. 5, 2013, http://archives.cjr.org/the_audit/jeff_bezoss_landmark_purchase.php
- 564 Cade Metz, "Jeff Bezos Bought *The Washington Post*. But So Did Amazon," *Wired*, Aug. 6, 2013, https://www.wired.com/2013/08/bezos-amazon-washington-post/
- Jessica A. Taylor, "Donald Trump Bans Washington Post From Campaign Events," NPR, Jun. 13, 2016, http://www.npr.org/2016/06/13/481923166/donald-trump-bans-washington-post-from-campaign-events
- Taylor Soper, "Donald Trump says Amazon CEO Jeff Bezos bought Washington Post for 'political influence," GeekWire, Feb. 26, 2016, www.geekwire.com/2016/donald-trump-says-amazon-ceo-jeff-bezos-bought-washington-post-political-influence/
- Joe Concha, "Trump has a point with media criticism," *The Hill*, Oct. 14, 2016, origin-nyi.thehill.com/blogs/pundits-blog/media/301009-is-there-actual-fire-in-the-smoke-of-trumps-media-criticism
- 568 "Ideological Placement of Each Source's Audience," Pew Research Center, Jan. 26, 2016, www.pewresearch. org/pj_14-10-21_mediapolarization-08-2/
- 569 Sonam Sheth, "People are furiously cancelling their New York Times subscriptions after an op-ed disputing climate change was published," *Business Insider*, Apr. 29, 2017, www.businessinsider.com/bret-stephens-new-york-times-climate-change-article-subscriptions-canceled-op-ed-2017-4
- 570 Bret Stephens, "Climate of Complete Certainty," *The New York Times*, Apr. 28, 2017, www.nytimes. com/2017/04/28/opinion/climate-of-complete-certainty.html?_r=0
- James Bennet, "Introducing Our New Columnist," *The New York Times*, Apr. 28, 2017, www.nytimes. com/2017/04/28/opinion/introducing-our-new-columnist.html?mcubz=3
- David Roberts, "The New York Times should not have hired climate change bullshitter Bret Stephens," Vox, May 1, 2017, https://www.vox.com/2017/5/1/15482698/new-york-times-bret-stephens
- 573 "Kenneth Caldeira," Carnegie Institution of Science, accessed Oct. 4, 2017, https://dge.carnegiescience.edu/labs/caldeiralab/
- Kenneth Caldeira, "Climate of Risk and Uncertainty," @kencaldeira, Oct. 4, 2017, https://kencaldeira.wordpress.com/2017/04/29/climate-of-risk-and-uncertainty/
- 575 Carl Bialik and Henry Enten, "The Polls Missed Trump. We Asked Pollsters Why.," FiveThirtyEight, Nov. 9, 2016, fivethirtyeight.com/features/the-polls-missed-trump-we-asked-pollsters-why/
- 576 David Uberti, "Drive-by journalism in Trumplandia," Columbiα Journalism Review, Jun. 19, 2017, www.cjr.org/united_states_project/trump-voters-media-coverage.php

- 577 Oliver Darcy, "BuzzFeed taps Cleveland Plain Dealer's Henry Gomez to cover Republican politics in age of Trump," *Business Insider*, Mar. 7, 2017, http://www.businessinsider.com/buzzfeed-henry-gomez-trump-coverage-republicans-2017-3
- Lydia Polgreen, "Letter From The Editor: HuffPost's New Chapter," HuffPost, Apr. 25, 2017, www.huffingtonpost.com/entry/lydia-polgreen-huffpost_us_58fe16b8e4b018a9ce5d2e4c
- Nicholas Carnes and Noam Lupu, "It's time to bust the myth: Most Trump voters were not working class.," *The Washington Post*, Jun. 5, 2017, https://www.washingtonpost.com/news/monkey-cage/wp/2017/06/05/its-time-to-bust-the-myth-most-trump-voters-were-not-working-class/?utm_term=.b9e17abf2f03
- 580 Tanzina Vega, "What about the black working class?," CNN Money, Nov. 23, 2016, http://money.cnn.com/2016/11/23/news/economy/black-working-class-trump/index.html
- Jack Shafer and Tucker Doherty, "The Media Bubble is Worse Than You Think," *Politico*, May/June 2017, www. politico.com/magazine/story/2017/04/25/media-bubble-real-journalism-jobs-east-coast-215048
- Clark Hoyt, "The Blur Between Analysis and Opinion," *The New York Times*, Apr. 13, 2008, www.nytimes. com/2008/04/13/opinion/13pubed.html
- 583 Tom Kutsch, "The blurred lines of native advertising," *Aljαzeerα Americα*, Mar. 8, 2014, america.aljazeera.com/articles/2014/3/8/the-blurred-linesofanativeaadvertising.html
- Lewis DVorkin, "Making New Connections in a New Media World," Forbes, Nov. 3, 2010, www.forbes.com/sites/lewisdvorkin/2010/11/03/making-new-connections-in-a-new-media-world/#70807df08c99
- Joe Lazauskas, "Native Advertising Is Broken. Here's How To Fix It.," Fast Company, Dec. 14, 2016, www. fastcompany.com/3066583/native-advertising-is-broken-heres-how-to-fix-it
- Brian Braiker, "Andrew Sullivan on native ads: Journalism has surrendered," $Digid\alpha y$, May 7, 2014, https://digiday.com/media/andrew-sullivan-native-ads/
- "Sotheby's," The New York Times Brand Studio, accessed Oct. 4, 2017, paidpost.nytimes.com/sothebys/the-elegance-of-eco-living.html?tbs_nyt=2017-sep-nytnative_hpmod&cpv_dsm_id=11843678
 - Home page, Vice News, accessed on Oct. 5, 2017, https://news.vice.com/en_us
- Eugene Robinson, "This Republican health-care bill is the most monstrous yet," *The Washington Post*, Sept. 21, 2017, www.washingtonpost.com/opinions/this-republican-health-care-bill-is-the-most-monstrous-yet/2017/09/21/cfd1a54e-9f0f-11e7-8ea1-ed975285475e_story.html?utm_term=.319deae1fb47
 - Opinion, The Boston Globe, accessed Oct. 4, 2017, www.bostonglobe.com/opinion
- Robert McCoppin, "From quaint destination to 'ghost town,' Long Groves tries to reinvent itself," *The Chicago Tribune*, Oct. 1, 2017, http://www.chicagotribune.com/news/ct-long-grove-fights-to-survive-met-20171001-story.html
- 592 Daniel Marans, "Sean Hannity: 'I'm Not a Journalist. I'm a Talk Show Host.," HuffPost, Apr. 14, 2016, www. huffingtonpost.com/entry/sean-hannity-not-a-journalist_us_570fc4f3e4b0ffa5937e6cd2
- Paul Farhi, "Sean Hannity thinks viewers can tell the difference between news and opinion. Hold on a moment," The Washington Post, Mar. 28, 2017, https://www.washingtonpost.com/lifestyle/style/sean-hannity-thinks-viewers-can-tell-the-difference-between-news-and-opinion-hold-on-a-moment/2017/03/27/eboc5870-1307-11e7-9e4f-09aa75d3ec57_story. html?utm_term=.d651dff74dad

- 594 Tré Goins-Phillips, "Napolitano: 'Three intelligence sources' say Obama used British intel service to spy on Trump," TheBlaze, Mar. 14, 2017, http://www.theblaze.com/news/2017/03/14/napolitano-three-intelligence-sources-say-obama-used-british-intel-service-to-spy-on-trump/
- Paul Farhi, "Sean Hannity thinks viewers can tell the difference between news and opinion. Hold on a moment," The Washington Post, Mar. 28, 2017, https://www.washingtonpost.com/lifestyle/style/sean-hannity-thinks-viewers-can-tell-the-difference-between-news-and-opinion-hold-on-a-moment/2017/03/27/eboc5870-1307-11e7-9e4f-09aa75d3ec57_story. html?utm_term=.d651dff74dad
- 596 "Andrew P. Napolitano," Fox News, accessed Oct. 5, 2017, http://www.foxnews.com/person/n/andrew-napolitano.html
- 597 Paul Begala, "Begala: The day Jon Stewart blew up my show," CNN, Feb. 12, 2015, www.cnn.com/2015/02/12/opinion/begala-stewart-blew-up-crossfire/index.html
- Paul Farhi, "Sean Hannity thinks viewers can tell the difference between news and opinion. Hold on a moment.," The Washington Post, Mar. 28, 2017, www.washingtonpost.com/lifestyle/style/sean-hannity-thinks-viewers-can-tell-the-difference-between-news-and-opinion-hold-on-a-moment/2017/03/27/eboc5870-1307-11e7-9e4f-09aa75d3ec57_story. html?utm_term=.b5be347c5996
- 599 Paul Farhi, "We Have Reached Peak Punditry," *The Washington Post*, Jun. 2, 2016, www.washingtonpost.com/sf/style/2016/06/02/pundits/?utm_term=.d6615e63635c
- 600 Derek Thompson, "The 'Trump Effect' on Cable News," *The Atlantic*, Jun. 17, 2016, www.theatlantic.com/business/archive/2016/06/the-trump-effect-and-cable-news/487472/
- 601 Bill Keller, "Is Glenn Greenwald the Future of News?," *The New York Times*, Oct. 27, 2013, www.nytimes. com/2013/10/28/opinion/a-conversation-in-lieu-of-a-column.html?smid=tw-share&_r=2&
- 602 Satire from The Borowitz Report, *The New Yorker*, accessed Oct. 4, 2017, www.newyorker.com/humor/borowitz-report
- 603 Richard Gingras, "Labeling fact-check articles in Google News," Google, Oct. 13, 2016, www.blog.google/topics/journalism-news/labeling-fact-check-articles-google-news/
 - 604 About Verified Accounts, Twitter, accessed Oct. 4, 2017, support.twitter.com/articles/119135
- 605 Chengcheng Shao, Giovanni Luca Ciampaglia, Onur Varol, Alessandro Flammini and Flippo Menczer, "The spread of fake news by social bots," Indiana University, Sept. 26, 2017, arxiv.org/abs/1707.07592
- 606 "Tom Rosenstiel," American Press Institute, accessed Oct. 4, 2017, www.americanpressinstitute.org/author/trosenstiel/
- Tom Rosenstiel, "What the post-Trump debate over journalism gets wrong," Brookings, Dec. 20, 2016, www. brookings.edu/research/what-the-debate-over-journalism-post-trump-gets-wrong/
 - 608 Scott Kraft phone interview with PEN America on Oct. 2, 2017
 - 609 PEN America interview with Claire Wardle, May 5, 2017 (phone)
- 610 "Why Doesn't America Read Anymore?," NPR, Apr. 1, 2014, www.npr.org/2014/04/01/297690717/why-doesnt-america-read-anymore
- Jay Hathaway, "NPR Pulled a Brilliant April Fools' Prank on People Who Don't Read," Gαwker, Apr. 3, 2014, http://gawker.com/npr-pulled-a-brilliant-april-fools-prank-on-people-who-1557745710

- Meredith L. Eaton, "We bet you'll share this article without even reading the whole thing," Muck Rack, Jul. 19, 2017, muckrack.com/daily/2017/07/19/we-bet-youll-share-this-article/
- 613 Tom Hale "Marijuana contains 'Alien DNA' From Outside Of Our Solar System, NASA Confirms," *IFLScience*, Jul. 13, 2016, www.iflscience.com/editors-blog/marijuana-contains-alien-dna-from-outside-of-our-solar-system-nasa-confirms/all/
- Tom Hale "Marijuana contains 'Alien DNA' From Outside Of Our Solar System, NASA Confirms," *IFLScience*, Jul. 13, 2016, www.iflscience.com/editors-blog/marijuana-contains-alien-dna-from-outside-of-our-solar-system-nasa-confirms/all/
- Maksym Gabielkov, Arthi Ramachandran, Augustin Chaintreau and Arnaud Legout, Social Clicks: What and Who Gets Read on Twitter?, ACM Sigmetrics / IFIP Performance 2016, 2016, https://hal.inria.fr/hal-01281190
- 616 "Fake News? Altered headline on Facebook jolts Virginia governor race," Syrαcuse.com, Mar. 24, 2017, www. syracuse.com/politics/index.ssf/2017/03/fake_news_altered_headline_on_facebook_jolts_virginia_governor_race.html
- 617 Graham Moomaw, "Stewart attacks Gillespie in Confederate-themed ad using doctored newspaper head-line," *The Roαnoke Times*, Mar. 29, 2017, http://www.roanoke.com/news/politics/stewart-attacks-gillespie-in-confederate-themed-ad-using-doctored-newspaper/article_a6205b44-7df3-5b62-a547-6929dfe7e2b1.html
- 618 "Fake News? Altered headline on Facebook jolts Virginia governor race," Syrαcuse.com, Mar. 24, 2017, www. syracuse.com/politics/index.ssf/2017/03/fake_news_altered_headline_on_facebook_jolts_virginia_governor_race.html
 - 619 "Amy Webb," Future Today Institute, accessed Oct. 4, 2017, futuretodayinstitute.com/amy-webb/
 - 620 PEN America interview with Amy Webb, April 25, 2017 (phone)
 - 621 PEN America interview with Jane Elizabeth, April 19, 2017
 - 622 PEN America interview with Dan Gillmor, April 27, 2017
- 623 "News Values and Principles," Associαted Press, accessed Oct. 5, 2017, https://www.ap.org/about/our-story/news-values
 - 624 PEN America interview with John Daniszewski, Oct. 3, 2017 (phone)
- 625 Aaron Pressman, "Don't Take the Bait from Trump, Journalists Say," Fortune, Jul. 19, 2017, http:// fortune.com/2017/07/19/trump-reporters-fake-news/
 - 626 Home page, Hearken, accessed Oct. 4, 2017, www.wearehearken.com/
- Hearken, "Show your work: Helping reporters be more transparent, earn trust and build audience with Hearken's notebook," *Medium*, Mar. 16, 2017, medium.com/we-are-hearken/show-your-work-helping-reporters-be-more-transparent-earn-trust-and-build-audience-with-open-5e246f3e143f
- 628 Ricardo Bilton, "With Open Notebook, Hearken wants to help news orgs do more of their reporting in public," NiemanLab, Apr. 24, 2017, www.niemanlab.org/2017/04/with-open-notebook-hearken-wants-to-help-news-orgs-do-more-of-their-reporting-in-public/
- 629 Adriana Gallardo, "Do You Know Someone Who Died or Nearly Died in Childbirth? Help Us Investigate Maternal Health," ProPublica, Feb. 10, 2017, https://www.propublica.org/getinvolved/item/help-propublica-and-npr-investigate-maternal-mortality?utm_campaign=sprout&utm_medium=social&utm_source=twitter&utm_content=1486697432; The New York Times, "The Oakland Fire: Delving Into What Happened, and Why," The New York Times, Dec. 8, 2016,

https://www.nytimes.com/2016/12/08/us/the-oakland-fire-delving-into-what-happened-and-why.html?smid=tw-share

- 630 Ricardo Bilton, "With Open Notebook, Hearken wants to help news orgs do more of their reporting in public," NiemanLab, Apr. 24, 2017, www.niemanlab.org/2017/04/with-open-notebook-hearken-wants-to-help-news-orgs-do-more-of-their-reporting-in-public/
- 631 Ricardo Bilton, "With Open Notebook, Hearken wants to help news orgs do more of their reporting in public," NiemanLab, Apr. 24, 2017, www.niemanlab.org/2017/04/with-open-notebook-hearken-wants-to-help-news-orgs-do-more-of-their-reporting-in-public/
- Malachy Browne, Natalie Reneau and Mark Scheffler, "How Syria and Russia Spun a Chemical Strike," *The New York Times*, Apr. 26, 2017, www.nytimes.com/video/world/middleeast/10000005063944/syria-chemical-attack-russia. html; Malachy Browne, "The Times Uses Forensic Mapping to Verify a Syrian Chemical Attack," *The New York Times*, May 1, 2017, www.nytimes.com/2017/05/01/insider/the-times-uses-forensic-mapping-to-verify-a-syrian-chemical-attack. html?mcubz=0&_r=0
- 633 Alejandra Matos and Emma Brown, "How The Washington Post examined suspensions in D.C. schools," *The Washington Post*, Jul. 18, 2017, www.washingtonpost.com/news/education/wp/2017/07/18/how-the-washington-post-examined-suspensions-in-d-c-schools/?utm_term=.c06e03585c1b&wpisrc=nl_buzz&wpmm=1
 - 634 PEN America interview with Sally Lehrman, May 8, 2017
- 635 The Trust Project, Santa Clara University, accessed Oct. 4, 2017, www.scu.edu/ethics/focus-areas/journal-ism-ethics/programs/the-trust-project/
 - 636 Eryn Carlson, "Flagging Fake News," NiemanReports, Apr. 14, 2017, niemanreports.org/articles/flagging-fake-news/
- 637 News Leadership Council, Santa Clara University, accessed Oct. 4, 2017, https://www.scu.edu/ethics/focus-areas/journalism-ethics/programs/the-trust-project/news-leadership-council/
- News Leadership Council, Santa Clara University, accessed Oct. 4, 2017, https://www.scu.edu/ethics/focus-areas/journalism-ethics/programs/the-trust-project/news-leadership-council/
- 639 The Trust Project, Santa Clara University, accessed Oct. 4, 2017 www.scu.edu/ethics/focus-areas/journal-ism-ethics/programs/the-trust-project/
- 640 Jeff Jarvis, "Building Trust in News," *Medium*, Oct. 25, 2014, medium.com/whither-news/building-trust-in-news-e85cfc07321f
- 641 Sally Lehrman, "What People Really Want From News Organizations," *The Atlantic*, May 25, 2017, www.the-atlantic.com/technology/archive/2017/05/what-people-really-want-from-news-organizations/526902/
- 642 Sally Lehrman, "What People Really Want From News Organizations," *The Atlantic*, May 25, 2017, www.the-atlantic.com/technology/archive/2017/05/what-people-really-want-from-news-organizations/526902/
- Sally Lehrman, "What People Really Want From News Organizations," *The Atlantic*, May 25, 2017, www.the-atlantic.com/technology/archive/2017/05/what-people-really-want-from-news-organizations/526902/
- "Indicators of Trust in the News," Santa Clara University, accessed Oct. 4, 2017, www.scu.edu/ethics/focus-areas/journalism-ethics/programs/the-trust-project/indicators-of-trust-in-the-news/
- 645 "Trust Protocol," Santa Clara University, accessed Oct. 4, 2017, www.scu.edu/ethics/focus-areas/journal-ism-ethics/programs/the-trust-project/collaborator-materials/

- 646 "Trust Protocol," Santa Clara University, accessed Oct. 4, 2017, www.scu.edu/ethics/focus-areas/journal-ism-ethics/programs/the-trust-project/collaborator-materials/
 - 647 PEN America interview with Sally Lehrman, May 8, 2017
- 648 Eryn Carlson, "Flagging Fake News," *NiemanReports*, Apr. 14, 2017, niemanreports.org/articles/flagging-fake-news/
- 649 "Trust Project Summit Report", Santa Clara University, accessed Oct. 4, 2017, www.scu.edu/ethics/focus-areas/journalism-ethics/programs/the-trust-project/trust-project-summit-report/ (Page 26)
- 650 "Trust Project Summit Report", Santa Clara University, accessed Oct. 4, 2017, www.scu.edu/ethics/focus-areas/journalism-ethics/programs/the-trust-project/trust-project-summit-report/ (Page 26)
 - 651 First Draft, Abour, accessed Oct. 4, 2017, firstdraftnews.com/about/
- 652 Laura Hazard Owen, "The Google-backed First Draft Coalition launches a site to help journalists verify social content," NiemanLab, Nov. 23, 2015, www.niemanlab.org/2015/11/the-google-backed-first-draft-coalition-launches-a-site-to-help-journalists-verify-social-content/
- 653 Shan Wang, "The French election is over. What's next for the Google- and Facebook-backed fact-checking effort there?," NiemanLab, May 8, 2017, www.niemanlab.org/2017/05/the-french-election-is-over-whats-next-for-the-google-and-facebook-backed-fact-checking-effort-there/
- 654 "French newsrooms unite to fight election misinformation with the launch of CrossCheck," First Draft, Feb. 6, 2017, firstdraftnews.com/crosscheck-launches/
- Motteo Moschella and Ryan Watts, "UK election: what we learned working with Full Fact," First Draft, Jun. 29, firstdraftnews.com/joint-venture-learnings/
- 656 Susan McGregor, "The 'huge issue' with identifying original content from media outlets," Columbia Journalism Review, Jul. 19, 2017, www.cjr.org/tow_center/authentication-digital-articles-fake-news.php
- 657 Matthew Ingram, "Facebook Partners with Craigslist's Founder to Fight Fake News," Fortune, Apr. 3, 2017, fortune.com/2017/04/03/facebook-newmark-trust/
- 658 Benjamin Mullin, "Can trust in the news be repaired? Facebook, Craig Newmark, Mozilla and others are spending \$14 million to try," Poynter, Apr. 3, 2017, www.poynter.org/news/can-trust-news-be-repaired-facebook-craignewmark-mozilla-and-others-are-spending-14-million
- 659 Laura Hazard Owen, "The News Integrity Initiative gives \$1.8 million to 10 projects focused on increasing trust in news," Nieman Lab, Oct. 4, 2017, http://www.niemanlab.org/2017/10/the-news-integrity-initiative-gives-1-8-million-to-10-projects-focused-on-increasing-trust-in-news/
- 660 Jeff Jarvis, "Fueling a Flight to Quality," *Medium*, May 2, 2017, https://medium.com/whither-news/fueling-a-flight-to-quality-5738eab37ad6
- 661 "Storyful, analytics firm taking aim at fake news," Fox News, May 2, 2017, www.foxnews.com/tech/2017/05/02/storyful-analytics-firm-taking-aim-at-fake-news.html
- 662 Jeff Jarvis, "Fueling a Flight to Quality," *Medium*, May 2, 2017, https://medium.com/whither-news/fueling-a-flight-to-quality-5738eab37ad6
 - 663 Storyful, homepage, accessed Oct. 4, 2017, storyful.com/

- Moat, homepage, accessed Oct. 4, 2017, moat.com/
- Mike Butcher, "Jimmy Wales' Wikitribune to combat fake news with wiki-powered journalism," *TechCrunch*, Apr. 24, 2017, techcrunch.com/2017/04/24/jimmy-wales-wikitribune-to-combat-fake-news-with-wiki-powered-journalism/
 - 666 "Wikitribune," Wikipedia, accessed Oct. 4, 2017, en.wikipedia.org/wiki/Wikitribune
- NSaffan, "Jimmy Wales thinks WikiTribune can fix the news. Is he right?," Poynter, Aug. 9, 2017, www.poynter. org/news/jimmy-wales-thinks-wikitribune-can-fix-news-he-right
- 668 Laura Hazard Owen, "Jimmy Wales on Wikitribune's business model and why it might cover not just politics but also dog breeding," NiemanLab, May 4, 2017, www.niemanlab.org/2017/05/jimmy-wales-on-wikitribunes-business-model-and-why-it-might-cover-not-just-politics-but-also-dog-breeding/
- NSaffan, "Jimmy Wales thinks WikiTribune can fix the news. Is he right?," Poynter, Aug. 9, 2017, www.poynter. org/news/jimmy-wales-thinks-wikitribune-can-fix-news-he-right
 - 670 Home page, Wikitribune, accessed Oct. 4, 2017, www.wikitribune.com/
- 671 Adrienne LaFrance, "The Problem with WikiTribune," *The Atlantic*, Apr. 25, 2017, www.theatlantic.com/technology/archive/2017/04/wikipedia-the-newspaper/524211/
- "Tom Price: 'It's Better For OurBudget If Cancer Patients Die More Quickly," Newslo, March 16, 2017, http://www.newslo.com/price-better-budget-cancer-patients-die-quickly/
- 673 "Tom Price: 'It's Better For OurBudget If Cancer Patients Die More Quickly," Newslo, March 16, 2017, http://www.newslo.com/price-better-budget-cancer-patients-die-quickly/
- 674 See (archived) "Tom Price: 'It's Better For OurBudget If Cancer Patients Die More Quickly," USPOLN.com http://web.archive.org/web/20170320221555/http://uspoln.com/2017/03/17/tom-price-better-budget-cancer-patients-die-quickly/
- 675 See (archived) "Tom Price: 'It's Better For OurBudget If Cancer Patients Die More Quickly," Politicops.com, http://web.archive.org/web/20170317053609/http://politicops.com/price-better-budget-cancer-patients-die-quickly/
- 676 MJ Lee and Lauren Fox, "HHS Secretary vows GOP health care bill 'so much better' than Obamacare," CNN, March 16, 2017, http://www.cnn.com/2017/03/15/politics/tom-price-town-hall-cnntv/index.html
- 677 CNN Live Event/Special: "DHHS Secretary Tom Price in Town Hall Meeting on Health Care. Aired 9-10p ET," CNN, Aired March 15, 2017, http://www.cnn.com/TRANSCRIPTS/1703/15/se.01.html
 - 678 Newslo: About Us, accessed Oct. 2, 2017, http://politicot.com/about-us/
- Joshua Gillin, "Fake quote: Tom Price did not tell cancer patients to die more quickly," *PolitiFact*, March 21, 2017, http://www.politifact.com/punditfact/statements/2017/mar/21/blog-posting/fake-quote-tom-price-did-not-tell-cancer-patients-/
- 680 Joshua Gillin, "Fake quote: Tom Price did not tell cancer patients to die more quickly," *PolitiFact*, March 21, 2017, http://www.politifact.com/punditfact/statements/2017/mar/21/blog-posting/fake-quote-tom-price-did-not-tell-cancer-patients-/
- 681 "Did Tom Price Say It Is 'Better For Our Budget If Cancer Patients Die More Quickly'?," Snopes, March 17, 2017, http://www.snopes.com/tom-price-cancer-patients/

- Snopes Video: "Did Tom Price Say It Is 'Better For Our Budget If Cancer Patients Die More Quickly'?," Facebook, March 17, 2017, https://www.facebook.com/snopesvideo/videos/vb.1222857311135336/1315612661859800/?type=2&theater
- 683 Joshua Gillin, "Fake quote: Tom Price did not tell cancer patients to die more quickly," *PolitiFact*, March 21, 2017, http://www.politifact.com/punditfact/statements/2017/mar/21/blog-posting/fake-quote-tom-price-did-not-tell-cancer-patients-/
- 684 Sydney Schaedel, "A Fake Tom Price Quote," FactCheck.org, March 23. 2017, http://www.factcheck.org/2017/03/fake-tom-price-quote/
- 685 Sydney Schaedel, "A Fake Tom Price Quote," FactCheck.org, March 23. 2017, http://www.factcheck.org/2017/03/fake-tom-price-quote/
- Joshua Gillin, "Fake quote: Tom Price did not tell cancer patients to die more quickly," *PolitiFact*, March 21, 2017, http://www.politifact.com/punditfact/statements/2017/mar/21/blog-posting/fake-quote-tom-price-did-not-tell-cancer-patients-/
 - 687 PEN America interview with Lori Robertson, April 26, 2017 (phone)
 - 688 PEN America interview with Lori Robertson, April 26, 2017 (phone)
- Michelle Ye Hee Lee, "Fighting falsehoods around the world: A dispatch on the growing global fact-checking movement," The Washington Post, July 14, 2017, https://www.washingtonpost.com/news/fact-checker/wp/2017/07/14/fighting-falsehoods-around-the-world-a-dispatch-on-the-global-fact-checking-movement/?utm_term=.a95e4570382c; Mark Stencel, "Global fact-checking up 50% in past year," Duke Reporters' Lab, Feb. 16, 2016, https://reporterslab.org/global-fact-checking-up-50-percent/
 - 690 About Snopes.com, Snopes, accessed Oct. 2, 2017, http://www.snopes.com/about-snopes/
- 691 Alicia Shepard, "Fact-Checking in the Age of Trump," Moyers & Company, Sept. 13, 2016, http://billmoyers.com/story/fact-checking-age-trump/
 - 692 FactCheck.org, Our Staff, accessed Oct. 2, 2017, http://www.factcheck.org/our-staff/
 - 693 FactCheck.org, Our Staff, accessed Oct. 2, 2017, http://www.factcheck.org/our-staff/
- Brooks Jackson, "What To Do When Your Friend's E-Mail Lies To You.," FactCheck.org, March 18, 2004, http://www.factcheck.org/2004/03/what-to-do-when-your-friends-e-mail-lies-to-you/
- 695 Brooks Jackson, "What To Do When Your Friend's E-Mail Lies To You.," FactCheck.org, March 18, 2004, http://www.factcheck.org/2004/03/what-to-do-when-your-friends-e-mail-lies-to-you/
- 696 Brooks Jackson, "What To Do When Your Friend's E-Mail Lies To You.," FactCheck.org, March 18, 2004, http://www.factcheck.org/2004/03/what-to-do-when-your-friends-e-mail-lies-to-you/
- 697 Brooks Jackson, "What To Do When Your Friend's E-Mail Lies To You.," FactCheck.org, March 18, 2004, http://www.factcheck.org/2004/03/what-to-do-when-your-friends-e-mail-lies-to-you/
- 698 Brooks Jackson, "What To Do When Your Friend's E-Mail Lies To You.," FactCheck.org, March 18, 2004, http://www.factcheck.org/2004/03/what-to-do-when-your-friends-e-mail-lies-to-you/
 - 699 Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 2, 2017, https://reporterslab.org/fact-checking/
 - 700 PEN America interview with Mark Stencel, Aug. 17, 2017

- 701 PEN America interview with Mark Stencel, Aug. 17, 2017
- Bill Adair and Ishan Thakore, "Fact-Checking Census finds continued growth around the world," Duke Reporters' Lab, Jan. 19, 2015, https://reporterslab.org/fact-checking-census-finds-growth-around-world/
 - 703 Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 2, 2017, https://reporterslab.org/fact-checking/
- Bill Adair, "At Global Fact 4: churros, courage and the need to expose propagandists," Duke Reporters' Lab, July 6, 2017, https://reporterslab.org/tag/politifact/
- Michelle Ye Hee Lee, "Fighting falsehoods around the world: A dispatch on the growing global fact-checking movement," *The Wαshington Post*, July 14, 2017, https://www.washingtonpost.com/news/fact-checker/wp/2017/07/14/fighting-falsehoods-around-the-world-a-dispatch-on-the-global-fact-checking-movement/?utm_term=.a95e4570382c
- 706 Bill Adair, "At Global Fact 4: churros, courage and the need to expose propagandists," Duke Reporters' Lab, July 6, 2017, https://reporterslab.org/tag/politifact/
- 707 Bill Adair and Mark Stencel, "How We Identify Fact-Checkers," Duke Reporters' Lab, June 22, 2016, https://reporterslab.org/how-we-identify-fact-checkers/
- 708 Bill Adair and Mark Stencel, "How We Identify Fact-Checkers," Duke Reporters' Lab, June 22, 2016, https://reporterslab.org/how-we-identify-fact-checkers/
- 709 Bill Adair, "Keep On Fact-Checking!," *The New York Times*, https://www.nytimes.com/interactive/projects/cp/opinion/election-night-2016/keep-on-fact-checking
- Michael Barthel, Jeffrey Gottfried and Kristine Lu, "Trump, Clinton Supporters Differ On How Media Should Cover Controversial Statements," Pew Research Center, Oct. 17, 2016, http://www.journalism.org/2016/10/17/trump-clinton-supporters-differ-on-how-media-should-cover-controversial-statements/ majorities-of-both-candidates-supporters-say-the-media-should-fact-check-though-a-larger-share-of-clinton-supporters-say-this
- Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 2, 2017, https://reporterslab.org/fact-checking/#; The Wαshington Post Fact Checker, accessed Oct. 2, 2017, http://www.washingtonpost.com/blogs/fact-checker/; ΔP News Fact Check, accessed Oct. 2, 2017, NPR Politics Fact Check, accessed Oct. 2, 2017, https://www.apnews.com/tag/APFactCheck; http://www.npr.org/sections/politics-fact-check
- Jasper Jackson, "BBC sets up team to debunk fake news," *The Guardian*, Jan. 12, 2017, https://www.theguardian.com/media/2017/jan/12/bbc-sets-up-team-to-debunk-fake-news
- 713 Liz Spayd, "A Late Entry by The Times Into the Fact-Check Biz," *The New York Times*, May 6, 2017, https://mobile.nytimes.com/2017/05/06/public-editor/a-late-entry-by-the-times-into-the-fact-check-biz.html?_r=1&mc_ci-d=ae505b4872&mc_eid=457a13d3c0&referer=
- 714 see: https://www.apnews.com/5c883100d0984eb0a52edec8a8f701ca/NOT-REAL-NEWS:-A-look-at-what-didn't-happen-this-week
 - 715 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
 - 716 See https://www.americanpressinstitute.org/category/fact-checking-project/
- 717 Fact-checking and accountability journalism project, accessed Oct. 2, 2017, https://www.americanpressinstitute.org/category/fact-checking-project/
- 718 "A guide to verifying digital content during breaking news situations," American Press Institute, Nov. 5, 2013, https://www.americanpressinstitute.org/need-to-know/shareable/guide-verifying-digital-content-breaking-news-situations/

- 719 Craig Silverman, *The Verification Handbook*, European Journalism Centre, http://verificationhandbook.com/downloads/verification.handbook.pdf
 - 720 Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 2, 2017, https://reporterslab.org/fact-checking/#
- Joshua Gillin, "Fake news that Pelosi had a breakdown credited to a familiar troll," *PolitiFact*, June 20, 2017, http://www.politifact.com/punditfact/statements/2017/jun/20/freedomcrossroadsus/fake-news-pelosi-had-breakdown-credited-familiar-t/
- Flagg Eagleton, "Nancy Pelosi Suffers Breakdown, Take From Capitol Hill On a Stretcher," Freedumjunkshun. com, http://freedumjunkshun.com/nancy-pelosi-suffers-breakdown-taken-from-capitol-hill-on-a-stretcher/; Joshua Gillin, "Fake news that Pelosi had a breakdown credited to a familiar troll," PolitiFact, June 20, 2017, http://www.politifact.com/punditfact/statements/2017/jun/20/freedomcrossroadsus/fake-news-pelosi-had-breakdown-credited-familiar-t
- 723 Joshua Gillin, "Fake news that Pelosi had a breakdown credited to a familiar troll," *PolitiFαct*, June 20, 2017, http://www.politifact.com/punditfact/statements/2017/jun/20/freedomcrossroadsus/fake-news-pelosi-had-breakdown-credited-familiar-t
- 724 Joshua Gillin, "Fake news that Pelosi had a breakdown credited to a familiar troll," *PolitiFαct*, June 20, 2017, http://www.politifact.com/punditfact/statements/2017/jun/20/freedomcrossroadsus/fake-news-pelosi-had-breakdown-credited-familiar-t
- 725 Joshua Gillin, "Fake news that Pelosi had a breakdown credited to a familiar troll," *PolitiFαct*, June 20, 2017, http://www.politifact.com/punditfact/statements/2017/jun/20/freedomcrossroadsus/fake-news-pelosi-had-breakdown-credited-familiar-t
- 726 The Pulitzer Prizes, The 2009 Pulitzer Prize Winner in National Reporting, Staff of St. Petersburg Times, http://www.pulitzer.org/winners/staff-69
 - 727 The Times Publishing Co., About Us, accessed Oct. 3, 2017 http://www.tampabay.com/company/
- 728 Aaron Sharockman, "Who pays for PolitiFact?" *PolitiFact*, Oct. 6, 2011, http://www.politifact.com/truth-o-meter/blog/2011/oct/06/who-pays-for-politifact/
 - 729 Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 2, 2017, https://reporterslab.org/fact-checking/#;
- 730 Bill Adair and Angie Drobnic Holan, "The Principles of PolitiFact, PunditFact and the Truth-O-Meter," PolitiFact, Nov. 1, 2013, http://www.politifact.com/truth-o-meter/article/2013/nov/01/principles-politifact-punditfact-and-truth-o-meter/
 - 731 PolitiFact, Editions, States, accessed Oct. 3, 2017, http://www.politifact.com/
 - 732 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
 - 733 Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 3, 2017, https://reporterslab.org/fact-checking/
 - 734 Duke Reporters' Lab: Fact-Checking Sites, accessed Oct. 3, 2017, https://reporterslab.org/fact-checking/
- Glenn Kessler, "About The Fact Checker," *The Washington Post*, Sept. 11, 2013, https://www.washingtonpost.com/news/fact-checker/about-the-fact-checker/?utm_term=.d641d37d6b29
 - 736 FactCheck.org, Our Staff, accessed Oct. 3, 2017, http://www.factcheck.org/our-staff/
 - 737 FactCheck.org, Undergraduate Fellows, accessed Oct. 3, 2017, http://www.factcheck.org/undergraduate-fellows/

- 738 Snopes.com Staff, accessed Oct. 3, 2017, http://www.snopes.com/snopes-staff/
- 739 PolitiFact, Staff, accessed Oct. 3, 2017, http://www.politifact.com/truth-o-meter/staff/
- 740 PEN America interview with Glenn Kessler, June 20, 2017 (email exchange), Aug. 14, 2017 (email exchange)
- Glenn Kessler, "About The Fact Checker," *The Washington Post*, Sept. 11, 2013, https://www.washingtonpost.com/news/fact-checker/about-the-fact-checker/?utm_term=.d641d37d6b29
 - 742 PEN America interview with Glenn Kessler, June 20, 2017 (email exchange), Aug. 14, 2017 (email exchange)
 - 743 PEN America interview with Glenn Kessler, June 20, 2017 (email exchange), Aug. 14, 2017 (email exchange)
- 744 The Washington Post, Fact Checker database, accessed Oct. 3, 2017, https://www.washingtonpost.com/graphics/politics/trump-claims-database/?tid=a_inl&utm_term=.0762071e08fd
- 745 Danielle Kurtzleben, "Do Fact Checks Matter?" NPR, Sept. 27, 2016, http://www.npr.org/2016/09/27/495233627/do-fact-checks-matter
- 746 Chris Vargo, Lei Guo and Michelle Amazeen, The agenda-setting power of fake news: A big data αnαlysis of the online media landscape from 2014 to 2016, Sage Journals, June 15, 2017, http://journals.sagepub.com/doi/full/10.1177/1461444817712086
- 747 Chris Vargo, Lei Guo and Michelle Amazeen, The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016, Sage Journals, June 15, 2017, http://journals.sagepub.com/doi/full/10.1177/1461444817712086
 - 748 PEN America interview with Alexios Mantzarlis, April 21, 2017 (phone)
 - 749 PEN America interview with Alexios Mantzarlis, April 21, 2017 (phone)
- Jestin Coler, "A Former Fake News Creator on Covering Fake News," *Nieman Reports*, May 1, 2017, http://niemanreports.org/articles/a-former-fake-news-creator-on-covering-fake-news/; Laura Sydell, "We Tracked Down A Fake-News Creator In The Suburbs. Here's What We Learned," *NPR*, Nov. 23, 2016, http://www.npr.org/sections/all-techconsidered/2016/11/23/503146770/npr-finds-the-head-of-a-covert-fake-news-operation-in-the-suburbs
- Jestin Coler, "A Former Fake News Creator on Covering Fake News," *Niemαn Reports*, May 1, 2017, http://niemanreports.org/articles/a-former-fake-news-creator-on-covering-fake-news/;
- 752 see: Laura Sydell, "We Tracked Down A Fake-News Creator In The Suburbs. Here's What We Learned," *NPR*, Nov. 23, 2016, http://www.npr.org/sections/alltechconsidered/2016/11/23/503146770/npr-finds-the-head-of-a-covert-fake-news-operation-in-the-suburbs
- 753 Sam Levin, "Facebook promised to tackle fake news. But the evidence shows it's not working," *The Guardian*, May 16, 2017, https://www.theguardian.com/technology/2017/may/16/facebook-fake-news-tools-not-working?utm_source=Daily+Lab+email+list&utm_campaign=35fa688a7c-dailylabemail3&utm_medium=email&utm_term=0_d68264f-d5e-35fa688a7c-364612713
- 754 Sam Levin, "Facebook promised to tackle fake news. But the evidence shows it's not working," *The Guardian*, May 16, 2017, https://www.theguardian.com/technology/2017/may/16/facebook-fake-news-tools-not-working?utm_source=Daily+Lab+email+list&utm_campaign=35fa688a7c-dailylabemail3&utm_medium=email&utm_term=0_d68264f-d5e-35fa688a7c-364612713

- "New fact-checking research: False information floods Twitter; many Americans 'confidently wrong,'" American Press Institute, April 29, 2015, https://www.americanpressinstitute.org/fact-checking-project/new-fact-checking-research-false-information-floods-twitter-many-americans-confidently-wrong/
- 756 "New fact-checking research: False information floods Twitter; many Americans 'confidently wrong,'" American Press Institute, April 29, 2015, https://www.americanpressinstitute.org/fact-checking-project/new-fact-checking-research-false-information-floods-twitter-many-americans-confidently-wrong/
 - 757 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
 - 758 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
 - 759 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
- 760 Full Fact Team, "Full Fact awarded \$500,000 to build automated factchecking tools," June 29, 2017, https://fullfact.org/blog/2017/jun/awarded-500000-omidyar-network-open-society-foundations-automated-factchecking/
- 761 Robert Booth, "Journalists to use 'immune system' software against fake news," *The Guardian*, Aug. 8, 2017, https://www.theguardian.com/technology/2017/aug/08/fake-news-full-fact-software-immune-system-journalism-sorosomidyar
- 762 Robert Booth, "Journalists to use 'immune system' software against fake news," *The Guardian*, Aug. 8, 2017, https://www.theguardian.com/technology/2017/aug/08/fake-news-full-fact-software-immune-system-journalism-sorosomidyar
- 763 Robert Booth, "Journalists to use 'immune system' software against fake news," *The Guardian*, Aug. 8, 2017, https://www.theguardian.com/technology/2017/aug/08/fake-news-full-fact-software-immune-system-journalism-sorosomidyar
- 764 Robert Booth, "Journalists to use 'immune system' software against fake news," *The Guardian*, Aug. 8, 2017, https://www.theguardian.com/technology/2017/aug/08/fake-news-full-fact-software-immune-system-journalism-sorosomidyar
- 765 Robert Booth, "Journalists to use 'immune system' software against fake news," *The Guardian*, Aug. 8, 2017, https://www.theguardian.com/technology/2017/aug/08/fake-news-full-fact-software-immune-system-journalism-sorosomidyar
- 766 Robert Booth, "Journalists to use 'immune system' software against fake news," *The Guardian*, Aug. 8, 2017, https://www.theguardian.com/technology/2017/aug/08/fake-news-full-fact-software-immune-system-journalism-sorosomidyar
 - 767 PEN America interview with Alexios Mantzarlis, April 21, 2017 (phone)
 - 768 PEN America interview with Alexios Mantzarlis, April 21, 2017 (phone)
- 769 Rebecca lannucci and Bill Adair, Heroes or hacks: The partisan divide over fact-checking, Duke Reporters' Lab, June 2017, https://drive.google.com/file/d/oBxoyrEbZxrAMNm9HV2tvcXFma1U/view
- Rebecca lannucci and Bill Adair, Heroes or hacks: The partisan divide over fact-checking, Duke Reporters' Lab, June 2017, https://drive.google.com/file/d/oBxoyrEbZxrAMNm9HV2tvcXFma1U/view
 - 771 PEN America interview with Brendan Nyhan, April 6, 2017 (email exchange)
 - 772 PEN America interview with Brendan Nyhan, April 6, 2017 (email exchange)

- 773 FactCheck, Our Funding, accessed Oct. 3, 2017, http://www.factcheck.org/our-funding/
- 774 Snopes Frequently Asked Questions, accessed Oct. 3, 2017, http://www.snopes.com/frequently-asked-questions/
- Help save Snopes.com! Go Fund Me campaign, accessed Oct. 3, 2017 https://www.gofundme.com/savesnopes; Daniel Funke, "Snopes met its \$500K fundraising goal. Now what?" Poynter, July 25, 2017, https://www.poynter.org/news/snopes-met-its-500k-fundraising-goal-now-what
 - 776 PEN America interview with Jane Elizabeth, April 19, 2017
 - 777 Snopes, Transparency: Methodology, http://www.snopes.com/methodology/
- T78 Eugene Kiely and Lori Robertson, "How to Spot Fake News," FactCheck.org, Nov. 18, 2016, http://www.factcheck.org/2016/11/how-to-spot-fake-news/; http://www.factcheck.org/askfactcheck
 - 779 FactCheck.org, Our Process, accessed Oct. 3, 2017, http://www.factcheck.org/our-process/
- 780 Glenn Kessler, "About The Fact Checker," *The Washington Post*, Sept. 11, 2013, https://www.washingtonpost.com/news/fact-checker/about-the-fact-checker/?utm_term=.d641d37d6b29
 - 781 PEN America interview with Tim Graham, May 18, 2017 (email exchange)
 - 782 PEN America interview with Tim Graham, May 18, 2017 (email exchange)
- Jill Abramson, "This may shock you: Hillary Clinton is fundamentally honest," *The Guardian*, March 28, 2016, https://www.theguardian.com/commentisfree/2016/mar/28/hillary-clinton-honest-transparency-jill-abramson
 - 784 PEN America interview with Tim Graham, May 18, 2017 (email exchange)
- 785 The Weekly Standard, Fact check section, accessed Oct. 9, 2017, http://www.weeklystandard.com/section/fact-check
- 786 Heather Timmons, "Facebook's latest solution to its fake news problem sign on right-wing fact-checker," Quartz, Oct. 7, 2017, https://qz.com/1095509/facebooks-latest-solution-to-its-fake-news-problem-sign-on-a-right-wing-fact-checker/
- 787 Rebecca lannucci and Bill Adair, Heroes or hacks: The partisan divide over fact-checking, Duke Reporters' Lab, June 2017, https://drive.google.com/file/d/oBxoyrEbZxrAMNm9HV2tvcXFma1U/view
- 788 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone); Andrew O'Hehir, "Charlie Sykes and the conscience of a (lonely) conservative," Salon, Oct. 7, 2017, https://www.salon.com/2017/10/07/charlie-sykes-and-the-conscience-of-a-lonely-conservative/; (Sykes left his radio show in Oct. 2016) Tom Tolan, "Charlie Sykes To Step Down From WTMJ Show," Milwaukee Magazine, Oct. 4, 2016, https://www.milwaukeemag.com/charlie-sykes-steps-down-wtmj/
 - 789 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone)
 - 790 Paradox, About, accessed Oct. 9, 2017, http://theparadoxproject.org/about/
- 791 Matt Shapiro, "Picking Your Facts: PolitiFact's Biased Choices," The Paradox Project, Dec. 22, 2016, http://theparadoxproject.org/blog-1/2016/12/20/picking-your-fact-politifacts-biased-fact-check-choices
- 792 Matt Shapiro, "PolitiFact's Own Truth Rating? Biased" The Paradox Project, Dec. 16, 2016, http://theparadox-project.org/blog-1/2016/12/4/mostly-false-politifact-and-bias

- 793 Matt Shapiro, "Picking Your Facts: PolitiFact's Biased Choices," The Paradox Project, Dec. 22, 2016, http://theparadoxproject.org/blog-1/2016/12/20/picking-your-fact-politifacts-biased-fact-check-choices
 - 794 Donald Trump's file, PolitiFact, accessed Oct. 9, 2017, http://www.politifact.com/personalities/donald-trump/
- 795 Matt Shapiro, "Picking Your Facts: PolitiFact's Biased Choices," The Paradox Project, Dec. 22, 2016, http://theparadoxproject.org/blog-1/2016/12/20/picking-your-fact-politifacts-biased-fact-check-choices
 - 796 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone)
- 797 Angie Drobnic Holan, "Obama's plan expands existing system," *PolitiFact*, Oct. 9, 2008, http://www.politifact.com/truth-o-meter/statements/2008/oct/09/barack-obama/obamas-plan-expands-existing-system/
- 798 Angie Drobnic Holan, "Barack Obama promises you can keep your health insurance, but there's no guarantee," *PolitiFact*, Oct. 9, 2008, http://www.politifact.com/truth-o-meter/statements/2008/oct/09/barack-obama/obamas-plan-expands-existing-system/
- 799 Louis Jacobson, "Barack Obama says that under hishealth care law, those who have health insurance will keep it," *PolitiFαct*, June 29, 2012, http://www.politifact.com/truth-o-meter/statements/2012/jun/29/barack-obama/barack-obama-says-under-his-health-care-law-those-/
- Jonathan Weisman, "Cancellation of Health Care Plans Replaces Website Problems as Prime Target," *The New York Times*, Oct. 29, 2013, http://www.nytimes.com/2013/10/30/us/politics/cancellation-of-health-care-plans-replaces-website-problems-as-prime-target.html?_r=0; Angie Drobnic Holan, "Lie of the Year: 'If you like your health care plan, you can keep it'," *PolitiFact*, Dec. 12, 2013, http://www.politifact.com/truth-o-meter/article/2013/dec/12/lie-year-if-you-like-your-health-care-plan-keep-it/
- 801 Angie Drobnic Holan, "Lie of the Year: 'If you like your health care plan, you can keep it'," *PolitiFαct*, Dec. 12, 2013, http://www.politifact.com/truth-o-meter/article/2013/dec/12/lie-year-if-you-like-your-health-care-plan-keep-it/
 - 802 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone)
 - 803 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone)
- 804 Opinion, "Facebook's Fake Fix for Fake News," *The Wall Street Journal*, Dec. 18, 2016, https://www.wsj.com/articles/facebooks-fake-fix-for-fake-news-1481932361
- 805 Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives, Vol. 31, Number 2, Spring 2017, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives, Vol. 31, Number 2, Spring 2017, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- 806 Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives, Vol. 31, Number 2, Spring 2017, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- 807 Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives, Vol. 31, Number 2, Spring 2017, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- 808 Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives, Vol. 31, Number 2, Spring 2017, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- 809 Sarah Jones, Minutes, New Republic, 2017, https://newrepublic.com/minutes/142650/stop-promoting-liber-al-conspiracy-theories-twitter

- 810 Sarah Jones, Minutes, New Republic, 2017, https://newrepublic.com/minutes/142650/stop-promoting-liber-al-conspiracy-theories-twitter
- 811 Hunt Allcott and Matthew Gentzkow, Social Media and Fake News in the 2016 Election, Journal of Economic Perspectives, Vol. 31, Number 2, Spring 2017, https://web.stanford.edu/~gentzkow/research/fakenews.pdf
- 812 Lucas Graves, Deciding What's True: The Rise of Political Fact-Checking in American Journalism, Columbia University Press, Sept. 6, 2016, https://www.amazon.com/Deciding-Whats-True-Fact-Checking-Journalism/dp/0231175078/
- 813 Danielle Kurtzleben, "Do Fact Checks Matter?" NPR, Sept. 27, 2016, http://www.npr.org/2016/09/27/495233627/do-fact-checks-matter
- 814 Danielle Kurtzleben, "Do Fact Checks Matter?" NPR, Sept. 27, 2016, http://www.npr.org/2016/09/27/495233627/do-fact-checks-matter
 - 815 PEN America interview with Bill Adair, May 9, 2017 (with additional email exchange)
- Adam Berinsky, Rumors and Health Reform: Experiments in Political Misinformation, British Journal of Political Science, June 19, 2015, https://www.cambridge.org/core/journals/british-journal-of-political-science/article/div-classtitlerumors-and-health-care-reform-experiments-in-political-misinformationdiv/8B88568CD057242D2D97649300215CF2
- Adam Berinsky, "This is how you stop fake news," *The Washington Post*, March 28, 2017, https://www.washingtonpost.com/news/monkey-cage/wp/2017/03/28/this-is-how-you-stop-fake-news/?utm_term=.7d7e0b900b4c
 - 818 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone)
 - 819 PEN America interview with Charlie Sykes, Aug. 16, 2017 (phone)
- Daniel Funke, "In Oklahoma, PolitiFact used campaign strategy to appeal to new readers. Will it work?," Poynter, Oct. 2, 20177, https://www.poynter.org/news/oklahoma-politifact-used-campaign-strategy-appeal-new-readers-will-it-work
- 821 Combating Fake News: An Agenda for Resarch and Action, Shorenstein Center on Media, Politics and Public Policy, Harvard Kennedy School, May 2, 2017, https://shorensteincenter.org/combating-fake-news-agenda-for-research/
- 822 Matthew A. Baum and David Lazer, "Google and Facebook aren't fighting fake news with the right weapons," Los Angeles Times, May 8, 2017, http://www.latimes.com/opinion/op-ed/la-oe-baum-lazer-how-to-fight-fake-news-20170508-story.html
- Peter Dizikes, "Study: Trying to correct political myths may only entrench them further," MIT News, May 5, 2015, http://news.mit.edu/2015/correcting-political-rumors-0505
- Molly Callahan, "The Fake News Phenomenon: How It Spreads, And How To Fight It," *Northeastern*, Feb. 2, 2017, http://news.northeastern.edu/2017/02/the-fake-news-phenomenon-how-it-spreads-and-how-to-fight-it/; Alexios Mantzarlis, "Repetition boosts lies but could help fact-checkers, too," Poynter, May 30, 2017, https://www.poynter.org/news/repetition-boosts-lies-could-help-fact-checkers-too
- Alexios Mantzarlis, "Fact-checking doesn't 'backfire," new study suggests," Poynter, Nov. 2, 2016, https://www.poynter.org/news/fact-checking-doesnt-backfire-new-study-suggests; Thomas Wood and Ethan Porter, *The Elusive Backfire Effect: Mass Attitudes' Steadfast Factual Adherence*, Aug. 5, 2016, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2819073
- 826 Alexios Mantzarlis, "Repetition boosts lies but could help fact-checkers, too," Poynter, May 30, 2017, https://www.poynter.org/news/repetition-boosts-lies-could-help-fact-checkers-too

- 827 "Did Tom Price Say It Is 'Better For Our Budget If Cancer Patients Die More Quickly'?," Snopes, March 17, 2017, http://www.snopes.com/tom-price-cancer-patients/
- Meg Kelly and Glenn Kessler, "Video: James Comey versus President Trump, a case of he-said, he-said," *The Washington Post*, June 9, 2017, https://www.washingtonpost.com/news/fact-checker/wp/2017/06/09/video-james-comey-versus-president-trump-a-case-of-he-said-he-said/?utm_term=.353242ae9afe
 - 829 PEN America interview with Glenn Kessler, June 20, 2017 (email exchange), Aug. 14, 2017 (email exchange)
 - 830 PEN America interview with Glenn Kessler, June 20, 2017 (email exchange), Aug. 14, 2017 (email exchange)
 - 831 PEN America interview with Craig Silverman, May 10, 2017 (phone)
 - 832 PEN America interview with Craig Silverman, May 10, 2017 (phone)
 - 833 PEN America interview with Craig Silverman, May 10, 2017 (phone)
 - 834 Simon Adler, Radiolab Podcast, July 27, 2017, (begin 26 min), http://www.radiolab.org/story/breaking-news/
 - 835 Simon Adler, Radiolab Podcast, July 27, 2017, (begin 26 min), http://www.radiolab.org/story/breaking-news/
 - 836 Simon Adler, Radiolab Podcast, July 27, 2017, (begin 26 min), http://www.radiolab.org/story/breaking-news/
 - 837 Simon Adler, Radiolab Podcast, July 27, 2017, (begin 28 min), http://www.radiolab.org/story/breaking-news/
 - 838 Simon Adler, Radiolab Podcast, July 27, 2017, (begin 28 min), http://www.radiolab.org/story/breaking-news/
 - 839 Quote Investigator, accessed Oct. 3, 2017, https://quoteinvestigator.com/2014/07/13/truth/
- 840 Media Use and Evaluation, Gallup News, accessed Sep. 28, 2017, http://news.gallup.com/poll/1663/media-use-evaluation.aspx
- 841 Mary Grace Antony and Ryan J. Thomas, "This is citizen journalism at its finest: YouTube and the public sphere in the Oscar Grant shooting incident," Sage Journals, June 14, 2010, http://journals.sagepub.com/doi/abs/10.1177/1461444810362492?journalCode=nmsa
- 842 Jihii Jolly, "New literacy vs. Media literacy," Columbiα Journalism Review, Sept. 4, 2014, http://archives.cjr.org/news_literacy_vs_media_literac.php
- 843 Camila Domonoske, "Students Have 'Dismaying' Inability To Tell Fake News From Real, Study Finds," *NPR*, Nov. 23, 2016, http://www.npr.org/sections/thetwo-way/2016/11/23/503129818/study-finds-students-have-dismaying-inability-to-tell-fake-news-from-real; *Evaluating Information: The Cornerstone of Civil Online Reasoning*, Stanford History Education Group, Nov. 22, 2016, https://sheg.stanford.edu/upload/V3LessonPlans/Executive%20Summary%2011.21.16. pdf
- Larry Atkins, "Fight fake news by making media literacy part of core curricula," The Philadelphia Inquirer, July 10, 2017, http://www.philly.com/philly/opinion/20170710_Fight_fake_news_by_making_media_literacy_part_of_core_curricula.html; Elia Powers, Teaching News Literacy in the Age Of New Media: Why Secondary School Students Should Be Taught to Judge the Credibility of the News They Consume, Washington University in St. Louis, Jan. 2010 http://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1454&context=etd
- News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017, https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf

- 846 News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017 (Page 5), https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf
- News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017 (Page 5), https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf
- News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017 (Page 17), https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf
- News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017 (Page 10), https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf
- 850 News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017 (Page 14), https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf
- How Millennials Get News: Inside the Habits of America's First Digital Generation, The Media Insight Project, March 2015 http://www.mediainsight.org/PDFs/Millennials/Millennials Report FINAL.pdf
- News and America's Kids: How Young People Perceive and Are Impacted by the News, Common Sense Media, March 2017 (Page 25) https://www.commonsensemedia.org/sites/default/files/uploads/research/2017_commonsense_newsandamericaskids.pdf
- Brooke Donald, "Stanford researchers find students have trouble judging the credibility of information online," Stanford Graduate School of Education, Nov. 22, 2016, https://ed.stanford.edu/news/stanford-researchers-find-students-have-trouble-judging-credibility-information-online; Evaluating Information: The Cornerstone of Civil Online Reasoning, Stanford History Education Group, Nov. 22, 2016, https://sheg.stanford.edu/upload/V3LessonPlans/Executive%20Summary%2011.21.16.pdf
- 854 Sue Shellenbarger, "Most Students Don't Know When News Is Fake, Stanford Study Finds," *The Wall Street Journal*, Nov. 21, 2016, https://www.wsj.com/articles/most-students-dont-know-when-news-is-fake-stanford-study-finds-1479752576
- lssie Lapowsky, "In a Fake Fact Era, Schools Teach the ABCs of News Literacy," WIRED, June 7, 2017, https://www.wired.com/2017/06/fake-fact-era-schools-teach-abcs-news-literacy/
- 856 Sue Shellenbarger, "Most Students Don't Know When News Is Fake, Stanford Study Finds," *The Wall Street Journal*, Nov. 21, 2016, https://www.wsj.com/articles/most-students-dont-know-when-news-is-fake-stanford-study-finds-1479752576
- 857 The News Literacy Project: Origin and History, accessed Sept. 28, 2017, http://www.thenewsliteracyproject.org/about/origin-and-history
- 858 David Frey, "Fighting Fake News," *Bethesda Magazine*, July-Aug. 2017, http://www.bethesdamagazine.com/Bethesda-Magazine/July-August-2017/Fighting-Fake-News/index.php?cparticle=2&siarticle=1
- 859 The News Literacy Project: Our Mission, accessed Sept. 28, 2017, http://www.thenewsliteracyproject.org/about/our-mission
 - 860 PEN America interview with Alan Miller, May 1, 2017

- 861 PEN America interview with Alan Miller, May 1, 2017
- lssie Lapowsky, "In a Fake Fact Era, Schools Teach the ABCs of News Literacy," WIRED, June 7, 2017 https://www.wired.com/2017/06/fake-fact-era-schools-teach-abcs-news-literacy/
- lssie Lapowsky, "In a Fake Fact Era, Schools Teach the ABCs of News Literacy," WIRED, June 7, 2017 https://www.wired.com/2017/06/fake-fact-era-schools-teach-abcs-news-literacy/; Craig Silverman's Six Steps To Spot Fake News and Other Misinformation, The News Literacy Project, March 22, 2017 http://pshs.psd202.org/documents/1503681816_CraigSilvermanGO_Updated.pdf
- 864 Cory Turner, "The Classroom Where Fake News Fails," NPR, Dec. 22, 2016, http://www.npr.org/sections/ed/2016/12/22/505432340/the-classroom-where-fake-news-fails
- 865 The News Literacy Project: Origin and History, accessed Sept. 28, 2017, http://www.thenewsliteracyproject.org/about/origin-and-history
 - 866 http://www.thenewsliteracyproject.org/services/checkology
- 867 Elia Powers, "How to Teach Media Literacy in a Virtual Classroom," MediαShift, June 12, 2017, http://mediashift.org/2017/06/teaching-media-literacy-in-a-virtual-classroom-q-a-with-news-literacy-projects-peter-adams/
- 868 Checkology Lesson "Know Your Zone: Sorting Information," accessed Sept. 28, 2017, https://checkology.org/demo/lesson/6404d0030729fc84bd4ec611d3b450b3eaafede6/1/elements/8
- 869 NLP Spotlight: The checkology Virtual Classroom Has Gone Viral, The News Literacy Project, Feb. 2017, http://www.thenewsliteracyproject.org/about/newsletter/february-2017 "Interest surged following the presidential election and the disclosure of the prevalence and power of online rumors, hoaxes and conspiracy theories ("fake news"), accompanied by a growing national debate about the nature and value of real news."
 - 870 PEN America interview with Alan Miller, May 1, 2017
 - 871 PEN America interview with Alan Miller, May 1, 2017
- 872 Alan Miller, PR Council Presentation on The News Literacy Project, July 24, 2017, https://www.slideshare.net/CouncilPRfirms/the-news-literacy-project
- 873 Alan Miller, "Sorting Fact From Fiction in the Digital Age With the News Literacy Project," Catalogue for Philanthropy, Aug. 3, 2017, https://www.cfp-dc.org/blog/2017/08/03/sorting-fact-from-fiction-in-the-digital-age-with-the-news-literacy-project/
 - 874 PEN America interview with Alan Miller, May 1, 2017
- 875 Lyndsay Beyerstein, "Can News Literacy Grow Up?" Columbia Journalism Review, Sept./Oct. 2014, http://archives.cjr.org/feature/can_news_literacy_grow_up.php
- 876 Editors, "Supply and Demand: Journalism must invest in educated consumers," Columbia Journalism Review, Jan./Feb. 2008, http://archives.cjr.org/editorial/supply_and_demand_1.php
 - 877 Center for News Literacy: Our History, accessed Sept. 28, 2017, https://www.centerfornewsliteracy.org/history/
- 878 Lyndsay Beyerstein, "Can News Literacy Grow Up?" Columbia Journalism Review Sep./Oct. 2014 http://archives.cjr.org/feature/can_news_literacy_grow_up.php
- 879 Adam Maksl, et al., "The Usefulness of a News Media Literacy Measure in Evaluating a News Literacy Curriculum," Sage Journals, May 26, 2016, http://journals.sagepub.com/doi/pdf/10.1177/1077695816651970

- 880 As cited in "New study on News Literacy evaluates the Stony Brook course," Center for News Literacy, Stony Brook University, June 29, 2017, https://www.centerfornewsliteracy.org/new-study-on-news-literacy-evaluates-the-stony-brook-course/
- 881 Adam Maksl, et al., "The Usefulness of a News Media Literacy Measure in Evaluating a News Literacy Curriculum," Sage Journals, May 26, 2016, http://journals.sagepub.com/doi/pdf/10.1177/1077695816651970
- Renee Loth, "What's Black and White and Retweeted All Over? Teaching news literacy in the digital age," Joan Shorenstein Center, Feb. 2012, https://shorensteincenter.org/wp-content/uploads/2012/03/d71_loth.pdf
- Masato Kajimoto, Developing news literacy curricula in the age of social media in Hong Kong, Vietnam and Myanmar, Journalism Education, May 2016, https://www.researchgate.net/publication/303564745_Developing_news_literacy_curricula_in_the_age_of_social_media_in_Hong_Kong_Vietnam_and_Myanmar
- Paul Mihailidis, Media Literacy and Informed Citizenship: An Analysis of Student Learning Outcomes Concerning Media's Roles and Responsibilities in Civil Society, Dec. 2, 2008, http://e09.cgpublisher.com/proposals/142/index_html
- 885 Joseph Kahne, Nam-Jin Lee, Jessica Timpany Feezell, Digital Media Literacy Education and Online Civil and Political Participation, International Journal of Communication, 2012, http://ijoc.org/index.php/ijoc/article/view/999
- 886 Joseph Kahne and Benjamin Bowyer, Educating for Democracy in a Partisan Age: Confronting the Challenges of Motivated Reasoning and Misinformation, American Educational Research Journal, Feb. 2017, http://www.civicsurvey.org/sites/default/files/publications/Educating_for_Democracy_in_a_Partisan_Age.pdf
- 887 Joseph Kahne and Benjamin Bowyer, Educating for Democracy in a Partisan Age: Confronting the Challenges of Motivated Reasoning and Misinformation, American Educational Research Journal, Feb. 2017 (Page 27), http://www.civicsurvey.org/sites/default/files/publications/Educating_for_Democracy_in_a_Partisan_Age.pdf
- 888 John Dyer "Can News Literacy Be Taught?" Nieman Reports, April 14, 2017, http://niemanreports.org/articles/can-news-literacy-be-taught/
- 889 John Dyer "Can News Literacy Be Taught?" Nieman Reports, April 14, 2017, http://niemanreports.org/articles/can-news-literacy-be-taught/
- 890 Digital Resource Center, Center for News Literacy, accessed Sept. 28, 2017, http://drc.centerfornewsliteracy.org/
- 891 Making Sense of the News: News Literacy Lessons for Digital Citizens, Coursera, accessed Sept. 28, 2017, https://www.coursera.org/learn/news-literacy
- 892 Katherine Schulten and Michael Gonchar "10 Ways to Teach With The New York Times, April 28, 2017, https://www.nytimes.com/2017/04/28/learning/lesson-plans/10-ways-to-teach-with-the-new-york-times-today.html?_r=0
- 893 Fighting Fake News: How to Outsmart Trolls and Troublemakers, NewseumEd, accessed Sept. 28, 2017, https://newseumed.org/class/fighting-fake-news/
- 894 Kitson Jazynka, "Colleges turn 'fake news' epidemic into a teachable moment," Wαshington Post Magazine, April 6, 2017, https://www.washingtonpost.com/lifestyle/magazine/colleges-turn-fake-news-epidemic-into-a-teachable-moment/2017/04/04/04/14436-fd30-11e6-99b4-9e613afeb09f_story.html?tid=a_inl&utm_term=.2680c3c442c4
 - 895 PEN America interview with Howard Schneider, May 2, 2017 (phone)
 - 896 PEN America interview with Howard Schneider, May 2, 2017 (phone)

- Scott Bedley, "I taught my 5th-graders how to spot fake news. Now they won't stop fact-checking me." Vox, March 29, 2017, https://www.vox.com/first-person/2017/3/29/15042692/fake-news-education-election
- Scott Bedley, "I taught my 5th-graders how to spot fake news. Now they won't stop fact-checking me." Vox, March 29, 2017, https://www.vox.com/first-person/2017/3/29/15042692/fake-news-education-election
- Scott Bedley, "I taught my 5th-graders how to spot fake news. Now they won't stop fact-checking me." Vox, March 29, 2017, https://www.vox.com/first-person/2017/3/29/15042692/fake-news-education-election
- 900 Michael Barthel, Amy Mitchell and Jesse Holcomb, "Many Americans Believe Fake News Is Sowing Confusion," Pew Research Center, Dec. 15, 2016, http://www.journalism.org/2016/12/15/many-americans-believe-fake-news-is-sowing-confusion/
- 901 Michael Barthel, Amy Mitchell and Jesse Holcomb, "Many Americans Believe Fake News Is Sowing Confusion," Pew Research Center, Dec. 15, 2016 http://www.journalism.org/2016/12/15/many-americans-believe-fake-news-is-sowing-confusion/
 - 902 PEN America interview with Jane Elizabeth, April 19, 2017
 - 903 PEN America interview with Jane Elizabeth, April 19, 2017
- 904 Marcus Banks, "Fighting Fake News: How libraries can lead the way on media literacy," *American Libraries*, Dec. 27, 2016 https://americanlibrariesmagazine.org/2016/12/27/fighting-fake-news/
- Joseph Lichterman, "The Dallas Morning News and Dallas Public Library are teaming up to offer workshops for students," *Nieman Lab*, June 23, 2016, http://www.niemanlab.org/2016/06/the-dallas-morning-news-and-dallas-public-library-are-teaming-up-to-offer-workshops-for-students/
- 906 American Library Association press release, "ALA, Center for New Literacy announce plans to create media literacy training for public libraries," July 13, 2017, http://www.ala.org/news/member-news/2017/07/ala-center-news-literacy-announce-plans-create-media-literacy-training-public
- 907 Benjamin Mullin, "Knight Foundation awards \$1 million to projects aimed at fighting misinformation," *Poynter*, June 22, 2017, https://www.poynter.org/news/knight-foundation-awards-1-million-projects-aimed-fighting-misinformation
- 908 "Game Sets Sights on Fake News," American University School of Communication, May 22, 2017, http://www.american.edu/soc/news/fake-news-game.cfm
- 909 "Breaking! We Turned #FakeNews Into An Arcade Game," ISL, July 10, 2017, https://isl.co/2017/07/play-fakenews/?ref=fake-news-microsite
- 910 Amanda Warner: Portfolio, accessed Sept. 28, 2017, http://www.amanda-warner.com/portfolio/everything; Fake It To Make It website, accessed on September 28, 2017 https://www.fakeittomakeitgame.com/
 - 911 PolitiFact on CinqMarsMedia website, accessed on Sept. 28, 2017, http://www.cinqmarsmedia.com/politifact/
- Christine Schmidt, "Games might be a good tool for fighting fake news. Here's what three developers have learned," Nieman Lab, Aug. 3, 2017, http://www.niemanlab.org/2017/08/games-might-be-a-good-tool-for-fighting-fake-news-heres-what-three-developers-have-learned/
- 913 PEN America interview with Erin McNeill, Sept. 29, 2017 (email exchange) and Oct. 9, 2017 (email exchange)
 - 914 Jihii Jolly, "New literacy vs. Media literacy," Columbia Journalism Review, Sept. 4, 2014, http://archives.cjr.org/

news_literacy/news_literacy_vs_media_literac.php

- 915 PEN America interview with Erin McNeill, Aug. 7, 2017 (phone)
- 916 PEN America interview with Erin McNeill, Aug. 7, 2017 (phone)
- 917 Media Literacy Now: Legislative Activity Across the Country, accessed Sept. 29, 2017, https://medialiteracynow.org/your-state-legislation/; PEN America interview with Erin McNeill, Oct. 9, 2017 (email exchange)
- 918 Nicole Fierro "New law promotes media literacy, internet safety in school curriculum," KEPR TV, http://keprtv.com/news/local/new-law-promotes-media-literacy-internet-safety-in-school-curriculum
- Nicole Fierro "New law promotes media literacy, internet safety in school curriculum," *KEPR TV*, http://keprtv.com/news/local/new-law-promotes-media-literacy-internet-safety-in-school-curriculum
- "How media literacy can help students discern fake news," PBS NewsHour, July 6, 2017, http://www.pbs.org/newshour/bb/media-literacy-can-help-students-discern-fake-news/
- Diane Rado, "Civics class required for high school graduation will push the envelope," *Chicago Tribune*, Sept. 7, 2015, http://www.chicagotribune.com/news/ct-civics-required-for-graduation-met-20150907-story.html
- 922 Civic Education Resource Site: About the ICMC, accessed Sept. 29, 2017, https://www.illinoiscivics.org/resources/about-the-icmc
 - 923 PEN America interview with Shawn Healy, July 27, 2017 (phone)
 - 924 PEN America interview with Erin McNeill, Aug. 7, 2017 (phone)
- 925 National Center for Education Statistics, Fast Facts, accessed Sept. 29, 2017, https://nces.ed.gov/fastfacts/display.asp?id=372
 - 926 PEN America interview with Dan Gillmor, April 27, 2017
 - 927 PEN America interview with Howard Schneider, May 2, 2017 (phone)
 - 928 PEN America interview with Alan Miller, May 1, 2017
- 729 The News Literacy Project: Partner News Organizations, accessed Sept. 29, 2017, http://www.thenewsliteracyproject.org/about-us/partner-news-organizations
 - 930 Correspondence with Alan Miller, News Literacy Project, Oct. 1, 2017.
 - 931 PEN America interview with Alan Miller, May 1, 2017
- 732 The News Literacy Project, Steve Schmidt bio, accessed Sept. 29, 2017, http://www.thenewsliteracyproject.org/about/board/steve-schmidt. Mollie Hemingway's position on the board is expected to be announced in October.
- 933 George W. Bush Presidential Center, Michael Gerson bio, accessed Sept. 29, 2017, http://www.bushcenter.org/people/michael-gerson.html
- "How media literacy can help students discern fake news," PBS NewsHour, July 6, 2017, http://www.pbs.org/newshour/bb/media-literacy-can-help-students-discern-fake-news/
 - 935 PEN America interview with Alan Miller, May 1, 2017

PEN AMERICA

588 Broadway, Suite 303 New York, NY 10012 tel (212) 334-1660 **pen.org**

