

The mixture of fact, fiction, and speculation in the American media is nothing new. Over the past 300 years, Americans have encountered hoaxes and fabrications in their newspapers, “investigative fiction” and “gray journalism” in literature, news satires on television, and a dizzying array of disinformation, misinformation, innuendo, conspiracy theories, and outright lies on the Internet.

The most recent wave of “fake news” has some people writing about a “post-truth Era.”

The truth crisis is two-fold. On one side, the dissemination of information made possible by the Internet has enabled producers of information to publish just about anything, true or not, for a mass market. Countless individuals and organizations—some duplicitous, others just untrained or careless—have taken advantage of this opportunity to advance their ideological agendas, pursue profit motives, or fulfill psychological needs.

On the other side, many consumers of this information lack the skills and, more importantly, even the inclination, desire, or will to sort fact from fiction. As humans, we tend to operate on an assumption of truth in communication, and we may suffer confirmation bias, motivated reasoning, “prior attitude effect,” stubborn worldviews, poor source memory, and a weakness for repetition, story coherence, and novelty.

The potential consequences are dire: poor decisions, bad policies, a reduced trust in the media, and even a breakdown of facts as the bedrock of understanding, debate, and policy.

What can educators do?

On the production side, government regulation or self-regulation by those who own or manage social media platforms might curb abuses, but such solutions could run counter to the First Amendment or corporate profit motives. In any case, we in academia have little control over production and distribution beyond our own efforts to conduct and disseminate research.

Our power lies on the consumption side. We can and do teach students—current and future consumers of news and other information—to evaluate and use information responsibly, but we need to do more.

We must educate them about confirmation bias, motivated reasoning, and the like so that they can be more intentional in weighing evidence. We can teach them strategies, such as psychological distancing, to make them more effective consumers of information. Finally, we must inspire them to crave and demand the truth.

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April 10, 2018

“The basis of our governments being the opinion of the people, the very first object should be to keep that right; and were it left to me to decide whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to prefer the latter.”

“The basis of our governments being the opinion of the people, the very first object should be to keep that right; and were it left to me to decide whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to prefer the latter. But I should mean that every man should receive those papers and be capable of reading them.”



Thomas Jefferson, letter to Edward Carrington, January 1787

I AM NOT AN ADVOCATE FOR FREQUENT
CHANGES IN LAWS AND CONSTITUTIONS.
BUT LAWS AND INSTITUTIONS MUST GO
HAND IN HAND WITH THE PROGRESS
OF THE HUMAN MIND. AS THAT BECOMES
MORE

Image Source Pixabay



Diffusing Knowledge

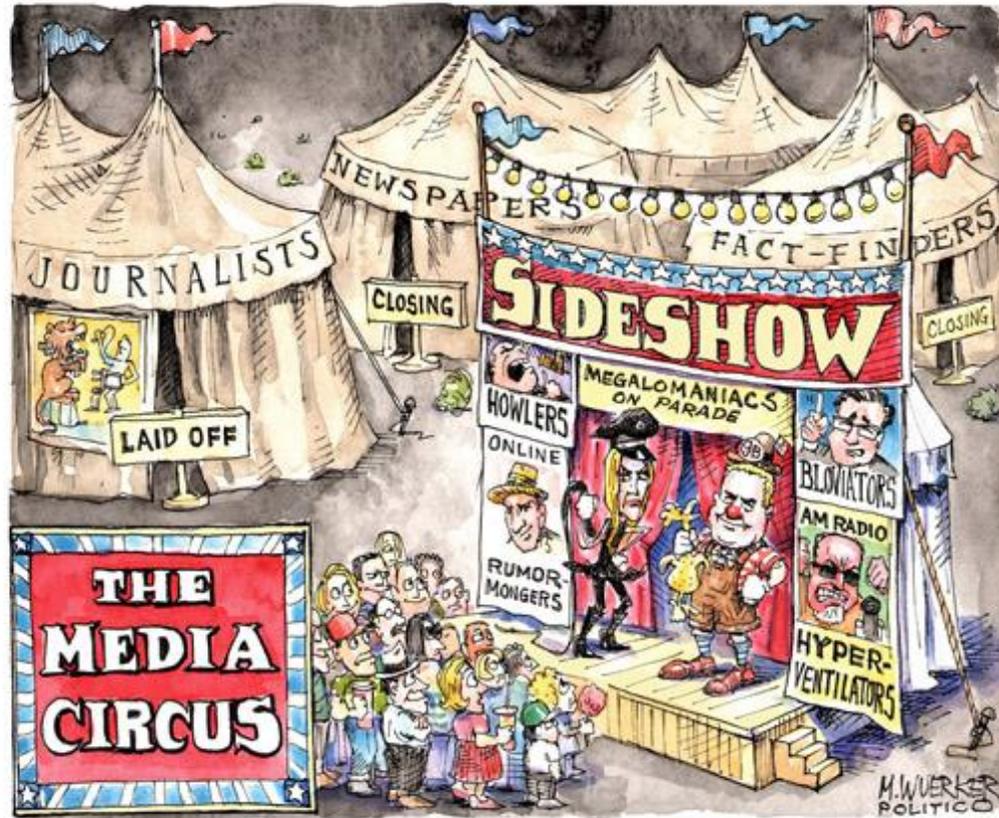
“. . . nothing but a newspaper can drop the same thought into a thousand minds at the same time.”

Alexis de Tocqueville, *Democracy in America*, 1835-1840

“The means which this organ affords of diffusing knowledge and sowing the seeds of thought where they may hardly fail of an infinite harvest, cannot be too highly prized by the discerning and the benevolent.”

Margaret Fuller, *Papers on Literature and Art*, 1846

... and More



Source: Matt Wuerker, political cartoon archives on Herb Block Foundation website, <https://www.herblockfoundation.org/herblock-prize/prize-winners/matt-wuerker>

Protecting and Pursuing the Truth in the Post-Truth Era

The American media industry has been a vehicle for both truth and lies for centuries.

In recent years, however, we have entered a new age—what some call the “Post-Truth Era.”

The democratization of the media, together with dramatic cultural and political developments, has created conditions that threaten sound decision- and policy-making, trust in the media, and even trust in truth itself.

What can educators do?

Overview

A Brief History of Truth in the U.S. Media

- Hoaxes
- News of Their Own
- New Journalism
- Transgressions

Post-Truth Era

- Alternative Facts?
- “Fake News”
- Misinformation Age
- Anatomy of Misinformation
- Mistrust of Mass Media
- Disregard for Truth

Causes of the Truth Crisis

- Democratization of Media
- Inadequate Evaluation
- Profit Motive
- Ideological Motives
- Psychological Factors

Solutions for the Truth Crisis

- Evaluation Strategies
- Initiation
- Education Strategies
- Distancing
- Curiosity
- Inspiration

History: Hoaxes

“The three families then almost simultaneously spread their wings, and were lost in the dark confines of the canvass before we had time to breathe from our paralyzing astonishment. We scientifically denominated them as *Vespertilio-homo*, or man-bat; and they are doubtless innocent and happy creatures, notwithstanding that some of their amusements would but ill comport with our terrestrial notions of decorum.”

“**Moon Hoax,**” *New York Sun*, 1835



Source:

<https://www.smithsonianmag.com/smithsonian-institution/great-moon-hoax-was-simply-sign-its-time-180955761/>

History: Hoaxes

“ . . . in fact, if (as some assert) the ‘Victoria’ *did* not absolutely accomplish the voyage recorded, it will be difficult to assign a reason why she *should* not have accomplished it .”

Note on Edgar Allan Poe’s “Balloon Hoax,” originally published in 1844

SUN OFFICE }
April 13, 10o'clock A.M. }

**ASTOUNDING
NEWS!**
BY EXPRESS VIA NORFOLK!

THE
ATLANTIC CROSSED
IN
THREE DAYS!

SIGNAL TRIUMPH
OF
MR. MONCK MASON'S
FLYING
MACHINE!!!

Arrival at Sullivan's Island,
near Charlestown, S. C., of
Mr. Mason, Mr. Robert Hol-
land, Mr. Henson, Mr. Har-
rison Ainsworth, and four
others, in the

STEERING BALLOON
“VICTORIA,”
AFTER A PASSAGE OF
SEVENTY-FIVE HOURS
FROM LAND TO LAND.

FULL PARTICULARS
OF THE
VOYAGE!!!

Source:

[https://www.eapoe.org/works/tal
es/ballhxa.htm](https://www.eapoe.org/works/tal/es/ballhxa.htm)

History: News of Their Own

“So many autumn, ay, and winter days, spent outside the town trying to hear what was in the wind, to hear and carry it express! I well-nigh sunk all my capital in it, and lost my own breath into the bargain, running in the face of it. If it had concerned either of the political parties, depend upon it, it would have appeared in the Gazette with the earliest intelligence.”

Henry David Thoreau, *Walden*, 1854

“There is a secret down here, in this nightmare fog, that has lain dumb for centuries: I want to make it a real thing to you.”

Rebecca Harding Davis, “Life in the Iron-Mills,” 1861

History: New Journalism

“What interested me was not simply the discovery that it was possible to write accurate non-fiction with techniques usually associated with novels and short stories. It was that—plus. It was that discovery that it was possible in non-fiction, in journalism, to use any literary device . . . to excite the reader both intellectually and emotionally.”

Tom Wolfe, *The New Journalism*, 1973

History: Transgressions

“I remember thinking, ‘If I just had the exact quote that I wanted to make it work, it would be perfect.’ And I wrote something on my computer, and then I looked at it, and I let it stand.”

Stephen Glass, *60 Minutes* interview, May 2003

Post-Truth Era: Alternative Facts?

“What—You’re saying it’s a falsehood. And they’re giving Sean Spicer, our press secretary, gave alternative facts to that.”

Kellyanne Conway, interview with Chuck Todd on *Meet the Press*, 2017

“We have an administration that seems to be asserting a right to its own facts and doesn’t seem to be able to produce evidence to back those claims.”

Joshua Benton, director of Harvard’s Nieman Journalism Lab, quoted in *New York Times*, 2017

Post-Truth Era: “Fake News”

“You are fake news.”

President-elect Donald Trump, remark to CNN reporter at press conference, 2017



Donald J. Trump 

@realDonaldTrump



FAKE NEWS media knowingly doesn't tell the truth. A great danger to our country. The failing [@nytimes](#) has become a joke. Likewise [@CNN](#). Sad!

11:09 PM - Feb 24, 2017

 105K  75.3K people are talking about this

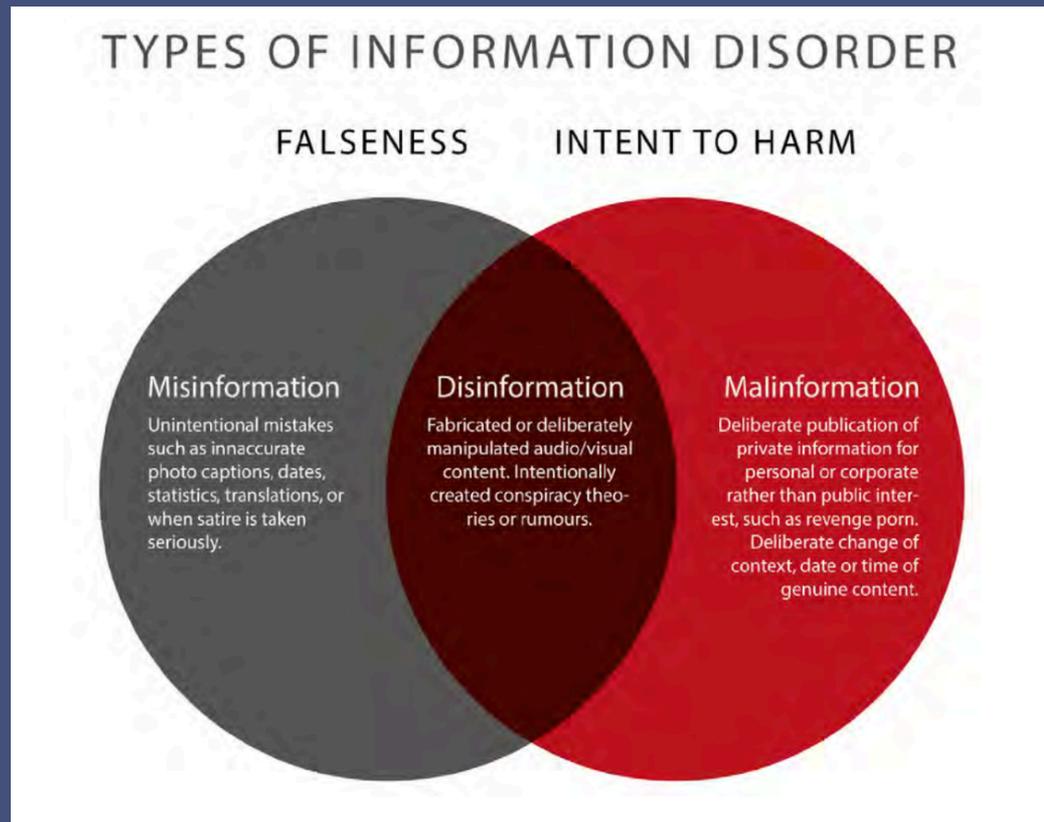


Post-Truth Era: Discussion

Question: Is the “Post-Truth Era” substantially different from earlier periods in media history? If so, what are the differences, and how much should we worry?

- Misinformation Age
- Mistrust of Mass Media
- Disregard for Truth Itself

Post-Truth Era: Misinformation Age



Source: Hossein Derakhshan and Claire Wardle, "Information Disorder: Definitions," *Understanding and Addressing the Disinformation Ecosystem* Annenberg School for Communication, December 15-16, 2017.

Post-Truth Era: Anatomy of Misinformation

Figure 3. Types of misinformation identified by our focus group participants and their overlap with news



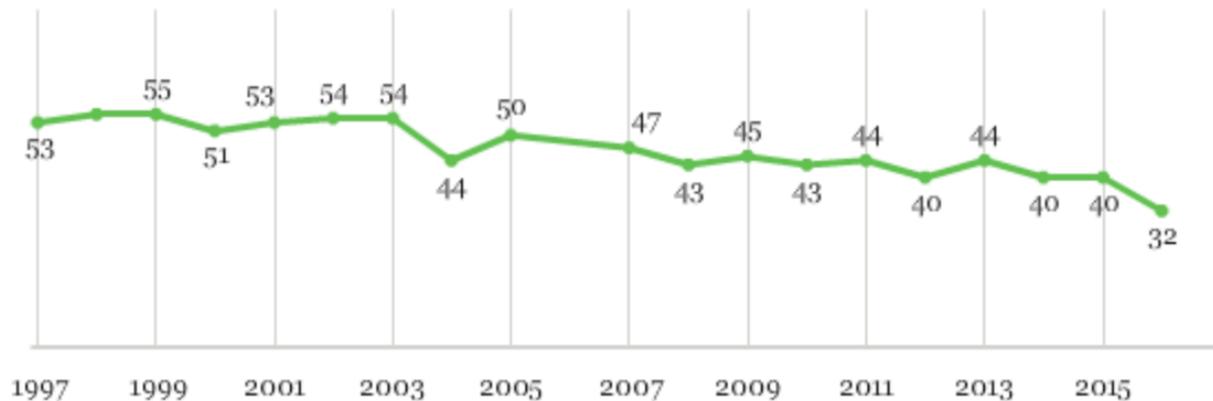
Source: Richard Fletcher and Rasmus Kleis Nielsen, "People Don't Trust News Media—and This is Key to the Global Misinformation Debate," *Understanding and Addressing the Disinformation Ecosystem* Annenberg School for Communication, December 15-16, 2017.

Post-Truth Era: Mistrust of Mass Media

Americans' Trust in the Mass Media

In general, how much trust and confidence do you have in the mass media -- such as newspapers, TV and radio -- when it comes to reporting the news fully, accurately and fairly -- a great deal, a fair amount, not very much or none at all?

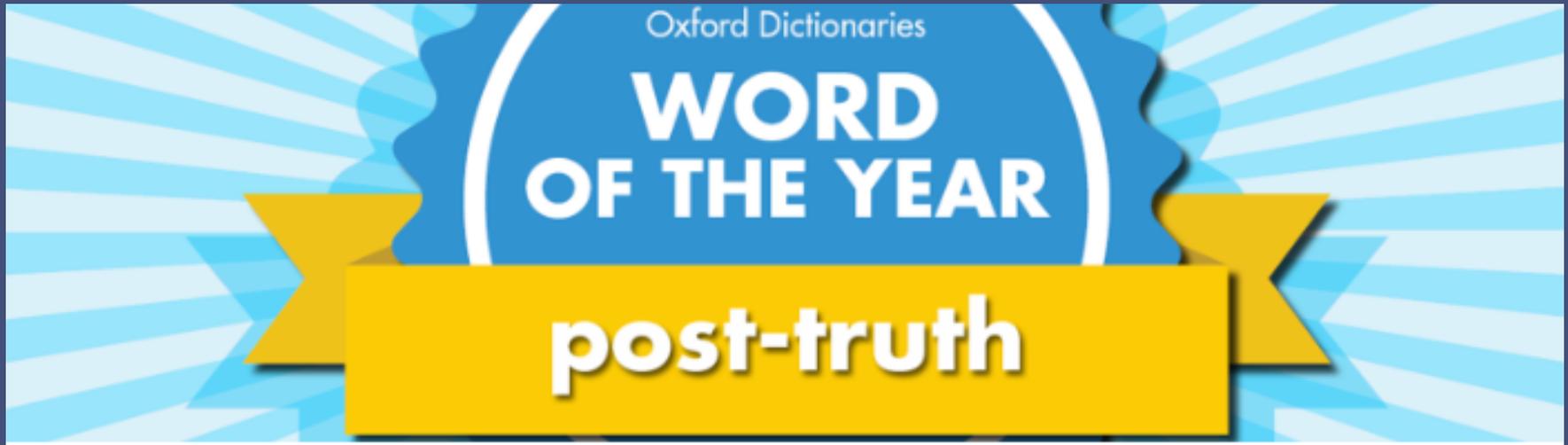
■ % Great deal/Fair amount



GALLUP®

Source: Art Swift, "Americans' Trust in Mass Media Sinks to New Low," Gallup (<http://news.gallup.com/poll/195542/americans-trust-mass-media-sinks-new-low.aspx>), September 14, 2016

Post-Truth Era: Disregard for Truth



“After much discussion, debate, and research, the Oxford Dictionaries Word of the Year 2016 is *post-truth* – an adjective defined as ‘relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.’”

Post-Truth Era: Disregard for Truth

“The truth has become so devalued that what was once the gold standard of political debate is a worthless currency.”

Matthew Norman, “Whoever Wins the US Presidential Election, We’ve Entered a Post-Truth World . . .,” November 8, 2016

“Yet although the lie was blatant and silly—and instantly exposable as such—there was no risk to him [Trump] telling it. Inhabitants of internet-created bubbles . . . are axiomatically beyond the reach of fact.”

Matthew Norman, “Whoever Wins the US Presidential Election, We’ve Entered a Post-Truth World . . .,” November 8, 2016

Causes: Discussion

Question: How did we get here? What factors helped to create the current truth crisis?

- Democratization and Polarization of Media
- Inadequate Evaluation
- Ideological Motives
- Profit Motive
- Psychological Factors

Causes: Democratization of Media

“Seek Truth and Report It.”

Society of Professional Journalists, SPJ Code of Ethics, 2014

“The great promise of the Internet was that it would bring democracies together, giving people more access to more information, all beyond the control of any single authority. . . . [paragraph] But somewhere along the way, the democratization of the flow of information became the democratization of the flow of disinformation. The distinction between fact and fiction was erased, creating a sprawling universe of competing claims.”

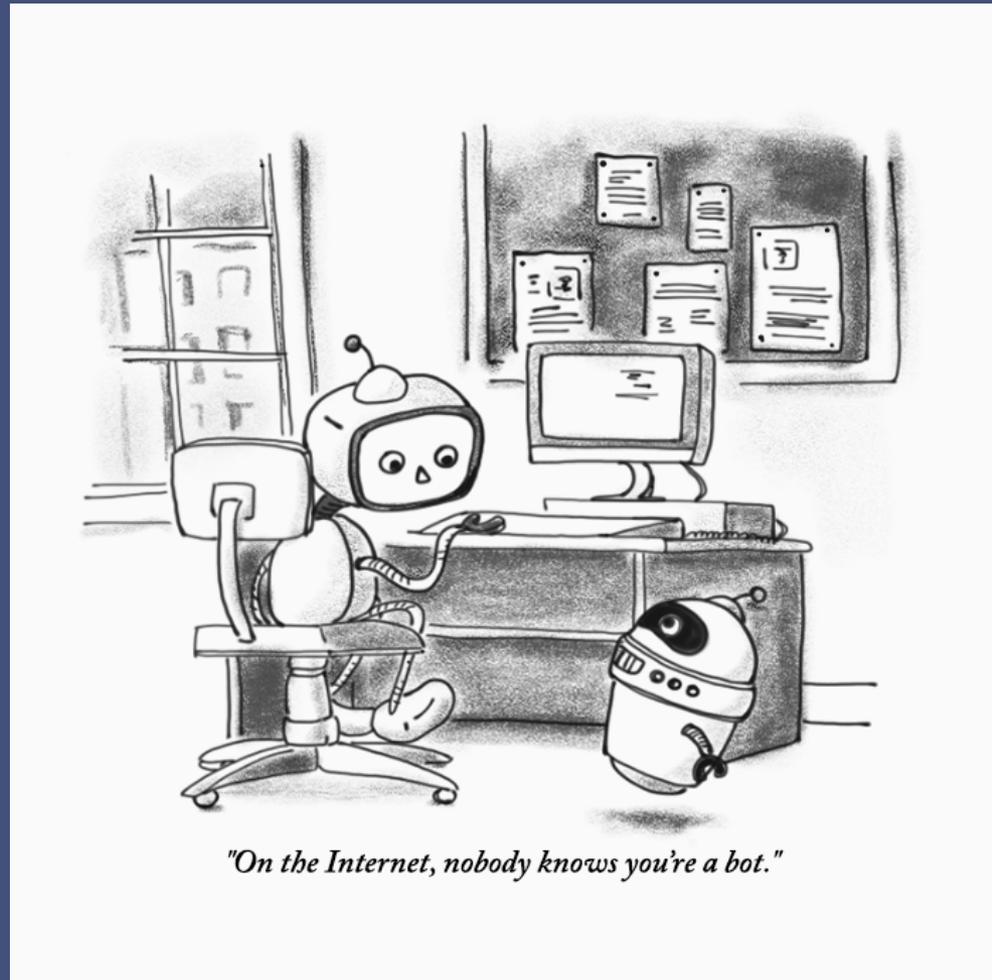
Jonathan Mahler, “The Problem with ‘Self-Investigation’ in a Post-Truth Era,” *The New York Times Magazine*, December 2016

Causes: Democratization of Media



Source: Peter Steiner, *New Yorker*, 1993 (reproduced in *Washington Post*, July 2013)

Causes: Democratization of Media



Source: "Domo Arigato, Mr. Roboto, Tell Us Your Secret," iA,
<https://ia.net/topics/domo-arigato-mr-roboto-tell-us-your-secret/>

Causes: Democratization of Media

“Twitter told Congress last year that it had detected 37,000 Russian state bots during the election, with the new sum a significant upward revision.”

Tom Porter, “If You Shared One of These Tweets . . .,” *Newsweek*, 2018

Causes: Democratization of Media

“About 47% of Americans overall report getting news from social media often or sometimes, with Facebook as, by far the dominant source . . .”

David M. J. Lazer, et al., “The Science of Fake News,” *Science*, 2018

“Our analysis of three hyperpartisan right-wing Facebook pages found that 38% of all posts were either a mixture of true and false or mostly false, compared to 19% of posts from three hyperpartisan left-wing pages that were either a mixture of true and false or mostly false.”

Craig Silverman et al., “Hyperpartisan Facebook Pages Are Publishing False And Misleading Information At An Alarming Rate,” *BuzzFeed News*, October 2016

Causes: Democratization of Media

“The more overtly partisan, misleading, or opinion-driven a post was, the more engagement the post would see, according to our data. Facebook, and the people using it, appears to reward the worst tendencies of these pages.”

Craig Silverman et al., “Hyperpartisan Facebook Pages Are Publishing False And Misleading Information At An Alarming Rate,” *BuzzFeed News*, October 2016

“Falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information . . .”

Soroush Vosoughi et al., “The Spread of True and False News Online,” *Science*, 2018

“Falsehood flies, and the Truth comes limping after it.”

Jonathan Swift, article in *The Examiner*, 1710

Causes: Polarization of Media

“When it comes to getting news about politics and government, liberals and conservatives inhabit different worlds. There is little overlap in the news sources they turn to and trust.”

Amy Mitchell et al., “Political Polarization & Media Habits,” Pew Research Center, October 2014

Trust of News Sources
% of respondents saying they trust each source

Source	Overall	Consistently liberal	Mostly liberal	Mixed	Mostly conservative	Consistently conservative
CNN	54%	56%	66%	61%	39%	14%
ABC News	50%	52%	59%	56%	40%	18%
NBC News	50%	56%	63%	54%	37%	16%
CBS News	46%	51%	55%	50%	36%	16%
Fox News	44%	6%	28%	47%	72%	88%
MSNBC	38%	52%	48%	39%	26%	7%
PBS	38%	71%	50%	31%	23%	8%
BBC	36%	69%	45%	28%	22%	12%
New York Times	34%	62%	45%	29%	17%	3%
USA TODAY	33%	29%	38%	38%	29%	14%
Wall Street Journal	31%	35%	34%	28%	32%	30%
NPR	29%	72%	36%	19%	14%	3%
Washington Post	27%	48%	33%	23%	17%	7%
Google News	25%	25%	26%	29%	20%	11%
Yahoo News	20%	17%	25%	22%	14%	10%
Huffington Post	18%	38%	21%	13%	10%	5%
Daily Show	16%	45%	21%	10%	5%	0%
Colbert Report	15%	36%	20%	10%	7%	2%
New Yorker	14%	32%	18%	11%	7%	1%
Economist	12%	30%	14%	7%	8%	4%
Sean Hannity Show	12%	0%	1%	6%	28%	62%
Rush Limbaugh Show	12%	0%	2%	6%	27%	58%
Bloomberg	11%	18%	13%	8%	8%	7%
Glenn Beck Program	10%	0%	1%	4%	24%	51%
Al Jazeera America	9%	28%	11%	3%	3%	3%

Source: “Where News Audiences Fit on the Political Spectrum,” Pew Research Center, October 2014, <http://www.journalism.org/interactives/media-polarization/table/trust/>.

Causes: Polarization of Media

“Personalized information environments are digital content delivery systems configured to suit the idiosyncratic tastes of a singular user. . . Many contemporary sociotechnical systems, including Facebook and Twitter, incorporate both manual and automated components to generate each user’s individual feed.”

Deen Freelon, “Personalized Information Environments and Their Potential Consequences for Disinformation,” *Understanding and Addressing the Disinformation Ecosystem*, December 2017

Causes: Ideological Motives

“Taking advantage of the opportunity the internet presents for collaboration, communication, and peer production, these groups [trolls, Men’s Rights advocates, white nationalists, etc.] target vulnerabilities in the news media ecosystem to increase the visibility of and audience for their messages.”

Alice Marwick and Rebecca Lewis, *Media Manipulation and Disinformation Online*, 2017

Causes: Profit Motive

“The over-load of information enabled by the internet makes attention an extremely valuable resource. . . . Viral content, from funny videos to sensational headlines, garners the clicks, retweets, and likes, and thus advertising revenue.”

Alice Marwick and Rebecca Lewis, *Media Manipulation and Disinformation Online*, 2017

“The Macedonians see a story elsewhere, write a sensationalized headline, and quickly post it to their site. Then they share it on Facebook to try and generate traffic. The more people who click through from Facebook, the more money they earn from ads on their website.”

Craig Silverman and Lawrence Alexander, *How Teens in the Balkans are Duping Trump Supporters With Fake News*, 2016

Causes: Psychological Motives

“‘Lulz’—a deliberate corruption of ‘lol,’—is a motivating force for some manipulators. The term refers to taking enjoyment at the expense of a victim, a kind of directed schadenfreude. . . . It has been used for years by trolls who explain their often-disruptive actions by simply stating ‘I did it for the lulz.’”

Alice Marwick and Rebecca Lewis, *Media Manipulation and Disinformation Online*, 2017

“Many chan users post about feeling unable to relate to mainstream culture, reflecting a sense of *anomie*.”

Alice Marwick and Rebecca Lewis, *Media Manipulation and Disinformation Online*, 2017

Causes: Psychological Motives

“On Facebook and Twitter, status is generated through likes, shares, and comments, so users are incentivized to create content that will resonate with their friends, followers, and groups.”

Alice Marwick and Rebecca Lewis, *Media Manipulation and Disinformation Online*, 2017

Causes: Inadequate Evaluation

“Overall, young people’s ability to reason about the information on the Internet can be summed up on one word: *bleak*.”

Stanford History Education Group, *Evaluating Information: The Cornerstone of Civic Online Reasoning: Executive Summary*, 2016

“Our main finding is that the survival of the fittest is far from a foregone conclusion where information is concerned. Both information loads and limited attention lead to low discriminative power, so that it becomes very difficult for the best memes to win .”

Qiu et al., “**Limited Individual Attention and Online Virality of Low-Quality Information**,” *Nature Human Behavior*, June 2017

Causes: Desire for Truth

“When looking only at respondents who said they had consumed news on Facebook, 27% trusted the information all or most of the time . . .”

Craig Silverman, “People Read News on Facebook But They Don’t Really Trust It, A Survey Found,” January 2017



Source: Pixabay

Causes: Basic Assumptions

“Although suspension of belief is possible (Masson, Simmons, & Todorov, 2005; Schul, Mayo, & Burnstein, 2008), it seems to require a high degree of attention, considerable implausibility of the message, or high levels of distrust at the time the message is received. So, in most situations, the deck is stacked in favor of accepting information rather than rejecting it, provided there are no salient markers that call the speaker’s intention of cooperative conversation into question.”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Causes: Poor Source Memory

“. . . the gist of a message is often more memorable than its source, and an engaging story from an untrustworthy source may be remembered and accepted long after the source has been forgotten. . .”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Causes: Repetition and Social Consensus

“Repetition effects may create a perceived social consensus even when no consensus exists. Festinger (1954) referred to social consensus as a ‘secondary reality test’: If many people believe a piece of information, there’s probably something to it.”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Causes: Story Coherence

“A story is compelling to the extent that it organizes information without internal contradictions in a way that is compatible with common assumptions about human motivation and behavior. Good stories are easily remembered, and gaps are filled with story-consistent intrusions. Once a coherent story has been formed, it is highly resistant to change . . .”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Causes: Biases

“Research also further demonstrates that people prefer information that confirms their preexisting attitudes (selective exposure), view information consistent with their preexisting beliefs as more persuasive than dissonant information (confirmation bias), and are inclined to accept information that pleases them (desirability bias).”

David M. J. Lazer, et al., “The Science of Fake News,” *Science*, 2018

Causes: Motivated Reasoning

“Slightly over one-tenth of respondents (10.2 percent) knew that no evidence had currently been found linking Saddam Hussein to 9/11 but nevertheless believed that Saddam was responsible for 9/11 and were able to give a reason for that belief.”

Monica Prasad, et al., “‘There Must Be a Reason’: Osama, Saddam, and Inferred Justification,” *Sociological Inquiry*, 2009

Causes: Prior Attitude Effect

“Our studies show that people are often unable to escape the pull of their prior attitudes and beliefs, which guide the processing of new information in predictable and sometimes insidious ways.”

Charles S. Tabor and Milton Lodge, “Motivated Skepticism in the Evaluation of Political Beliefs,” *American Journal of Political Science*, 2006

Causes: Belief Polarization

“In another example, supporters and opponents of nuclear power reacted in opposite fashion to identical descriptions of technological breakdowns at a nuclear plant: Whereas supporters focused on the fact that the safeguards worked to prevent the accident from being worse, opponents focused on the fact that the breakdown occurred in the first place (Plous, 1991).”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Causes: Persistence of Error

“Although no WMDs were ever found in Iraq and its link to al-Qaida turned out to be unsubstantiated, large segments of the U.S. public continued to believe the administration’s earlier claims, with some 20% to 30% of Americans believing that WMDs had actually been discovered in Iraq years after the invasion (Kull, Ramsay, & Lewis, 2003; Kull et al., 2006) and around half of the public endorsing links between Iraq and al-Qaida (Kull et al., 2006). These mistaken beliefs persisted even though all tentative media reports about possible WMD sightings during the invasion were followed by published corrections. . . .”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Solutions: Regulation

“Facebook announced an intent to shift its algorithm to account for ‘quality’ in its content curation process. Twitter announced that it blocked certain accounts linked to Russian misinformation and informed users exposed to those accounts that they may have been duped.”

David M. J. Lazer, et al., “The Science of Fake News,” *Science*, 2018

Solutions: Discussion

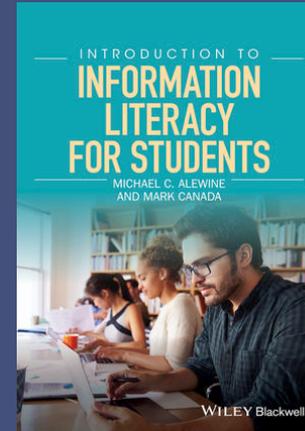
Question: What can educators do? How can we use our understanding of the causes of the truth crisis to combat it?

- Evaluation Strategies
- Distancing
- Desire
- Self-Affirmation
- Initiation
- Curiosity
- Education Strategies
- Inspiration

Solutions: Evaluation Strategies

Introduction to Information Literacy for Students (Alewine and Canada, 2017)

- “Is it relevant?”
- “Is it reliable?”
- “Is it recent?”



Web Literacy for Student Fact-Checkers (Caulfield, 2018)

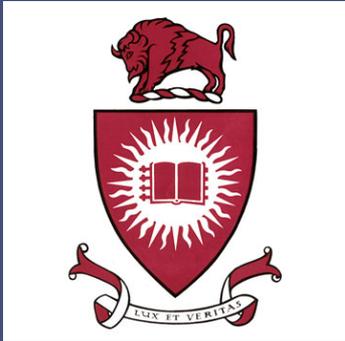
- “Look around to see if someone else has already fact-checked the claim or provided a synthesis of research.”
- “Go ‘upstream’ to the source of the claim.”
- “Read laterally.”
- “When you feel strong emotion . . . and that emotion pushes you to share a ‘fact’ with others, STOP.”

Solutions: Desire

“It takes two to speak the truth,—one to speak, and another to hear.”

Henry David Thoreau, *A Week on the Concord and Merrimack Rivers*

Solutions: Initiation



Source: Harvard University, "About Harvard: History,"
<https://www.harvard.edu/about-harvard/harvard-glance/history>

Solutions: Education Strategies

Production and Dissemination

- Democratization of Media
- Polarization of Media
- Ideological Motives
- Profit Motive
- Psychological Factors

Consumption

- Basic Assumptions
- Poor Source Memory
- Repetition and Social Consensus
- Story Coherence
- Biases
- Motivated Reasoning
- Prior Attitude Effect

Question: How might we go about exposing students to these factors?

Solutions: Distancing

“The findings from the present research address precisely this issue [“psychological mechanisms that underlie the process”]. They indicate that people who ‘distance’ while reasoning over personally meaningful issues think and behave in ways that prior research suggests is wise.”

Ethan Kross and Igor Grossmann, “Boosting Wisdom: Distance from the Self Enhances Wise Reasoning, Attitudes, and Behavior,” *Journal of Experimental Psychology*, 2012

Solutions: Self-Affirmation

“Compared with people who received no affirmation, those who self-affirmed became more receptive to messages that otherwise might have threatened their worldviews. Self-affirmation may give the facts a fighting chance (Cohen et al., 2007, Nyhan & Reifler, 2011) by helping people handle challenges to their worldviews.”

Stephan Lewandowsky, et al., “Misinformation and Its Correction: Continued Influence and Successful Debiasing,” *Psychological Science in the Public Interest*, 2016

Solutions: Curiosity

“The data presented in this article suggest that science curiosity . . . seems to counteract rather than aggravate the signature characteristics of politically motivated reasoning.”

“To avoid squandering the value that open-minded, science-curious citizens can contribute to political discourse . . ., science communicators should scrupulously avoid putting them in that position.”

Dan M. Kahan et al., “Science Curiosity and Political Information Processing,” *Political Psychology*, 2017

Solutions: Inspiration

“One of the reasons that motivated reasoning and rationalization evolved is that it, actually, in the short term and sometimes in the long term serves our individual interests. But it doesn’t serve us as a democracy. Democracy depends on that. And in the long run, perhaps the consequences are not in our best interests.”

Jonathan Ellis, NPR Interview, January 2017

The mixture of fact, fiction, and speculation in the American media is nothing new. Over the past 300 years, Americans have encountered hoaxes and fabrications in their newspapers, “investigative fiction” and literary journalism in literature, news satires on television, and a dizzying array of disinformation, misinformation, innuendo, conspiracy theories, and outright lies on the Internet.

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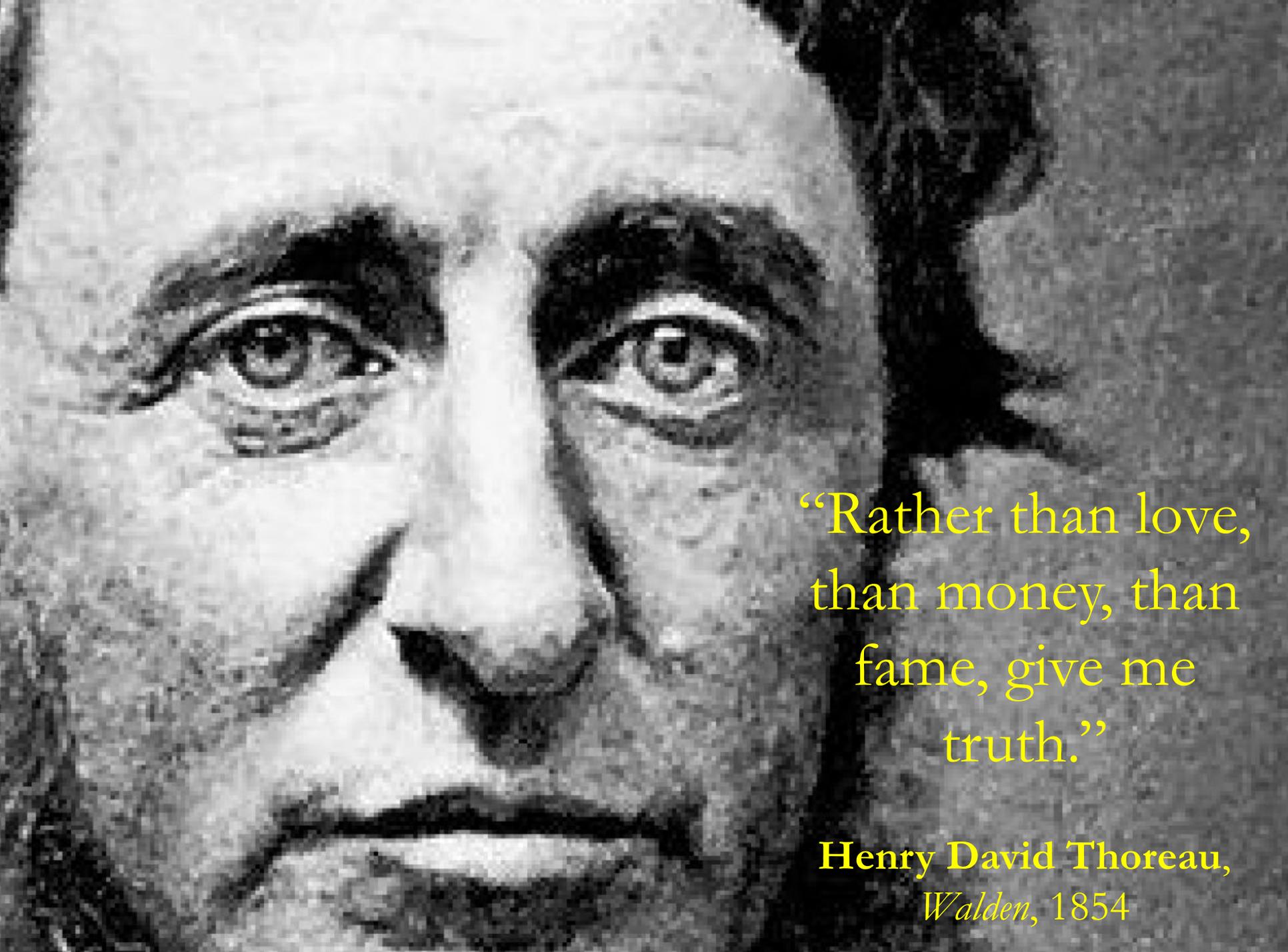
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We can teach them strategies, such as psychological distancing, to make them more effective consumers of information. Finally, we must inspire them to **crave and demand the truth**.

“Truth uncompromisingly told will always have its jagged edges.”

Herman Melville, *Billy Budd, Sailor*

1. Teaching students to evaluate sources critically is necessary, but not sufficient.
2. As educators, we must initiate students into our world, where truth matters.
3. Ultimately, we must inspire a hunger for the truth with all its “jagged edges.”



“Rather than love,
than money, than
fame, give me
truth.”

Henry David Thoreau,
Walden, 1854