

Talking points

Fake News: Sorting Fact from Fiction

- I. Opening: BBC's fake news quiz: [Quiz: Can you spot the fake stories?](#)

LINK: <https://www.surveymonkey.com/r/TMK7XN9>

A. Objective of webinar:

"To provide the knowledge and resources necessary to aid in discerning between biased, fake, and true news sources."

1. Biased v Fake news
2. How to spot them
3. Avoiding inaccuracy in research

B. Brief history of fake news

[The True History of Fake News](#) & [The Long and Brutal History of Fake News](#)

1. 6th century AD, Byzantine empire
 - a) Procopius - Byzantine historian, whose work about the Emperor Justinian & his wife Theodora, "Secret History," is one of the only, and most contested source of information on Justinian's reign.
 - (1) Translation & info found here: [Medieval Sourcebook: Procopius of Caesarea: The Secret History](#)
2. 15th century, Trent, Italy
 - a) After a kidnapped infant is found murdered on Easter Sunday, anti-semitic sources spread the story that the boy was murdered by the Jewish community and his blood mixed with their Passover bread. This story was further spread by the new invention of the printing press. *Story of a Christian Child Murdered at Trent*, was the first book published in the city. Prince-Bishop Johannes Hinderbach was the presiding official of this trial, which saw eight men convicted and hanged, their possessions seized, and their surviving families forced into Christianity.
 - (1) Details from: [rent at the beginning of the 16th century](#)
3. Late 19th century, Spanish-American War, New York & the US
 - a) William Randolph Hearst & the rise of yellow journalism - Born out of a circulation war between Pulitzer's World and Hearst's Journal, the newspapers headlines became more and more sensational, focusing on playing off of public rage, prejudice, and fears instead of facts. The more creative and bold a headline, the more papers were sold.

ie: USS Maine -- February 15, 1898, sunk in Havana harbor due to a deck fire that caught a stash of ammunition on fire. Yellow journalism seized upon the rumor that it was sunk due to a mine in the harbor, causing public outcry for war.



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ie: Hearst, Anslinger & the outlawing of marijuana.

WHO:

US Treasurer: Andrew Mellon

DuPont Chemicals

Henry Ford

Harry Anslinger

William Hearst

HOW:

Hemp: challenged other industries like cotton & timber -

*easy to grow regardless of climate

*shortened growing season

*gentleness on the soil (hemp plants' roots are long and deep, leaving the ground able to support crops very soon after harvest)

* 10,000 acres devoted to hemp will produce as much paper as 40,000 acres of average pulp land

*Hemp could also be grown 100% locally, instead of imported. (80% of cotton was imported)

1. U.S. Secretary of the Treasury - Andrew Mellon, owner of Mellon Bank- one of the backers for DuPont. Mellon's niece was married to Harry Anslinger, who was the head of the Department of Prohibition, and was soon to be out of a job after the alcohol prohibition ended. In 1930, Mellon created the Bureau of Narcotics, and made Anslinger the new head of the program.
2. DuPont was a chemical company that created chemicals to process paper, pesticides, herbicides, fertilizers. Hearst owned & invested in timber companies & paper mills that used DuPont's chemical process to produce the paper necessary for the New York journal, and his investments were backed by Mellon Bank.
3. In the 1930s, Henry Ford's biomass conversion plant in Iron Mountain, Michigan, unveiled hemp-based fuel and plastic- much stronger than anything else on the market.
4. After World War 1, Mellon Bank, gave DuPont a loan in order to buy stock in General Motors. In 1920, Pierre DuPont became president of GM. At the same time Ford was experimenting with hemp, DuPont had invented new gasoline additives, as well as the sulfate and sulfite process that made trees into paper. The pesticides and fertilizers such as DuPont manufactured were heavily used in cotton & timber industries that were now beginning to feel threatened by hemp.

HOW

1933: Anslinger used the multiple homicide case of Victor Licata, who hacked his family to death with an axe, citing his actions as the result of smoking "the demon's weed."

Hearst's newspapers, playing off of rampant racism, spread fake news about the evils of marijuana, and lies and rumors about Mexicans and African-Americans becoming violent under the drug.

1934: 'Reefer madness' was released.

1937: Marijuana was completely banned (in upcoming years, this was expanded to include hemp)

World War II: hemp's ban was lifted due to the manufacturing strain created by the war effort. Post WW2, the Navy & Air Force were ordered to destroy all hemp materials.

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4. World War II Nazi propaganda
 5. 1950s- present : Rise of the tabloid. [Midweek madness](#)
Enquirer. Ok! Life & Style. Star. The Onion etc.
Accuracy of Tabloids: [Which Tabloids Lie the most](#) Gawker
US Weekly: 35% Cover Accuracy, 59% Overall Accuracy
Life & Style 25% Cover Accuracy, 34% Overall Accuracy
In Touch: 9% Cover Accuracy, 21% Overall Accuracy
Ok!: 7% Cover Accuracy, 14% Overall Accuracy
Star: 9% Cover Accuracy, 12% Overall Accuracy
- II. Biased v. Fake News: Why the difference matters
- A. Biased News/Media: prejudiced and partial in favor of one side or the other.
 1. A reader's bias can play into the creation or marketing of fake news.
 - a) Cognitive Bias: an unintentional pattern that rationalizes otherwise illogical conclusions. "Subjective social reality"
<https://betterhumans.coach.me/cognitive-bias-cheat-sheet-55a472476b18#.7576ztq35>
 - (1) Information Overload - When confronted with too much information, we automatically filter out the things we don't agree with.
 - (2) Information Ambiguity - there isn't enough information, so we fill in the blanks with things we already believe/know
 - B. Fake News: completely lacking fact, with the goal of swaying the reader towards one side or the other.
 1. Not all fake news is political!
 - a) Bigfoot/Nessie/Yeti videos
- III. How to spot fake news
- A. Decoding Articles
 1. Check the domain name
 - a) Good:
 - (1) Government websites: <http://www.worldstandards.eu/other/tlds/>
 - (2) Organizational & non-profit sites: .org
 - (3) Educational sites: .edu
 2. Check the author
 - a) Does the author writing appear in other websites? Is he cited by anyone else? Can you find a validated biography?
 3. Check the facts
 - a) Are other websites confirming the story?
 - (1) ALWAYS check with a confirmed news source
 4. Look at the site itself
 - a) Is there an over-abundance of ads?
 - b) Is there a verified "about" page?
 5. Quick guides:
 - a) Carl Sagan's Rules (via brainpickings.org)

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1. Wherever possible **there must be independent confirmation** of the “facts.”
 2. **Encourage substantive debate** on the evidence by knowledgeable proponents of all points of view.
 3. Arguments from authority carry little weight — **“authorities” have made mistakes in the past.** They will do so again in the future. Perhaps a better way to say it is that in science there are no authorities; at most, there are experts.
 4. **Spin more than one hypothesis.** If there’s something to be explained, think of all the different ways in which it could be explained. Then think of tests by which you might systematically disprove each of the alternatives. What survives, the hypothesis that resists disproof in this Darwinian selection among “multiple working hypotheses,” has a much better chance of being the right answer than if you had simply run with the first idea that caught your fancy.
 5. **Try not to get overly attached to a hypothesis just because it’s yours.** It’s only a way station in the pursuit of knowledge. Ask yourself why you like the idea. Compare it fairly with the alternatives. See if you can find reasons for rejecting it. If you don’t, others will.
 6. **Quantify.** If whatever it is you’re explaining has some measure, some numerical quantity attached to it, you’ll be much better able to discriminate among competing hypotheses. What is vague and qualitative is open to many explanations. Of course there are truths to be sought in the many qualitative issues we are obliged to confront, but finding them is more challenging.
 7. If there’s a chain of argument, **every link in the chain must work** (including the premise) — not just most of them.
 8. Occam’s Razor. This convenient rule-of-thumb urges us when faced with **two hypotheses that explain the data equally well to choose the simpler.**
 9. **Always ask whether the hypothesis can be, at least in principle, falsified.** Propositions that are untestable, unfalsifiable are not worth much. Consider the grand idea that our Universe and everything in it is just an elementary particle — an electron, say — in a much bigger Cosmos. But if we can never acquire information from outside our Universe, is not the idea incapable of disproof? **You must be able to check assertions out.** Inveterate skeptics must be given the chance to follow your reasoning, to duplicate your experiments and see if they get the same result.
 - b) IFLA rules <https://blogs.ifla.org/lpa/files/2017/01/How-to-Spot-Fake-News.pdf>
 - c) Onthemedia.org handout
<http://www.wnyc.org/story/breaking-news-consumer-handbook-fake-news-edition/>
- B. Photos
(examples from: digitaltrends.com and petapixel.com)
1. Look for signs:
 - a) Check the metadata
 - b) Look for toolmarks
 - c) Check shadows & shading

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- d) When in doubt: Google image search
- 2. Spotting manipulated photos:
 - a) <https://www.poynter.org/2012/three-ways-to-spot-if-an-image-has-been-manipulated/173387/>
 - b) <http://lifelifehacker.com/5644259/how-to-detect-a-photoshopped-image>
 - c) <https://www.scientificamerican.com/article/5-ways-to-spot-a-fake/>

C. Videos

1. Easy tips:

- a) Always. Be. Skeptical when watching a video that is NOT directly from a validated news source
- b) Video forensics:
 - (1) Object proportions: Are sizes correct? How about the sun angle/shadows?
 - (2) Impossible physics: Does the motion seem exaggerated or choppy?
 - (3) “Fake shake”
 - (a) If the camera doesn’t move/ if it’s static= tripod. Any “breaking” or “eye witness” videos that are devoid of movement/camera shaking are probably not true.
 - (4) Clarity: If it’s unnecessarily blurry, it’s fake. (ie: Bigfoot, UFOs, etc)
 - (5) Check the comments (contrary to the often sanity-saving ‘don’t check the comments’ saying)
 - (a) Many times, hoax specialists will say so in the comments
 - (6) Do a Google search of the video’s title + “hoax”

2. Wired video forensic tips: <https://www.wired.com/2014/10/physics-fake-videos/>

IV. Avoiding inaccuracy in research

A. Confirm research with trusted sources

1. Find at minimum three *different* sources

B. Stay as close to scholarly/ peer reviewed articles as you can

1. Why is this important?

- a) Peer review has been a confirmed method of publishing for over 300 years.
- b) See points from [PUBLISHING YOUR WORK IN A JOURNAL: UNDERSTANDING THE PEER REVIEW PROCESS](#)

V. Closing:

A. Results of BBC quiz.

B. How to Chose your news TedEd talk

<http://ed.ted.com/lessons/how-to-choose-your-news-damon-brown>

Or?

https://www.washingtonpost.com/video/national/how-to-spot-fake-news/2016/11/18/60daed34-adb2-11e6-8f19-21a1c65d2043_video.html

C. Questions