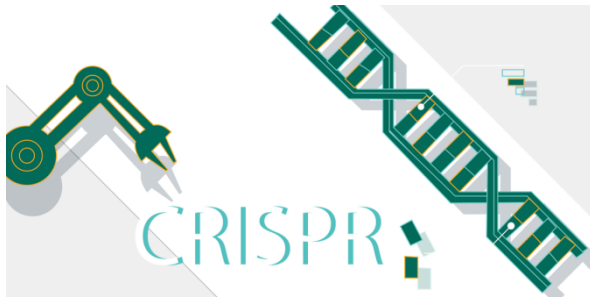


# Information analysis in a digital world



# The world is changing...



# Why bother? Simple cases of misinformation

## *Reading Fake News, Pakistani Minister Directs Nuclear Threat at Israel*

By RUSSELL GOLDMAN DEC. 24, 2016



Defense Minister Khawaja Muhammad Asif of Pakistan, center, in Islamabad last year.

### RELATED COVERAGE



How a Putin Fan Overseas Pushed Pro-Trump Propaganda to Americans DEC. 17, 2016



As Fake News Spreads Lies, More Readers Shrug at the Truth DEC. 6, 2016



Inside a Fake News Sausage Factory: 'This Is All About Income' NOV. 25, 2016



How Fake News Goes Viral: A Case Study NOV. 20, 2016



**Ministry of Defense** @Israel\_MOD

24 Dec

Replying to @KhawajaMAsif

The statement attributed to fmr Def Min Yaalon re Pakistan was never said



**Ministry of Defense**

@Israel\_MOD



reports referred to by the Pakistani Def Min are entirely false

7:14 PM - Dec 24, 2016



26



94



76



US



# Acute cases of misinformation: Echo chambers



**#AbusivePTI**  
**#AbusivePTI**  
**#AbusivePTI**



**#PMLNDirtyTrolls**  
**#PMLNDirtyTrolls**  
**#PMLNDirtyTrolls**



Filter bubbles of like-minded people who conform to biases



# Did the Japanese Government Ban Microwave Ovens?

- ▶ No matter what language you hear it in, this rumor is shady.
- ▶ DAN EVON, PUBLISHED 3 MAY 2019



# Was a Trophy Hunter Eaten Alive by Lions after He Killed 3 Baboon Families?

- ▶ The death of a single poacher has been rehashed and embellished numerous times by disreputable websites.
- ▶ DAN EVON, PUBLISHED 25 MARCH 2019



# Did U.S. Reps. Ocasio-Cortez and Ilhan Omar Praise the Destruction of Notre Dame?

- ▶ The newly elected members of the U.S. House of Representatives are frequent targets of partisan misinformation.
- ▶ DAVID EMERY, PUBLISHED 18 APRIL 2019



# Was Donald Trump Born in Pakistan?

- ▶ A spoof conspiracy theory holds that Donald Trump was born in the country of Pakistan and not in the United States.
- ▶ DAN EVON, PUBLISHED 14 NOVEMBER 2016



US





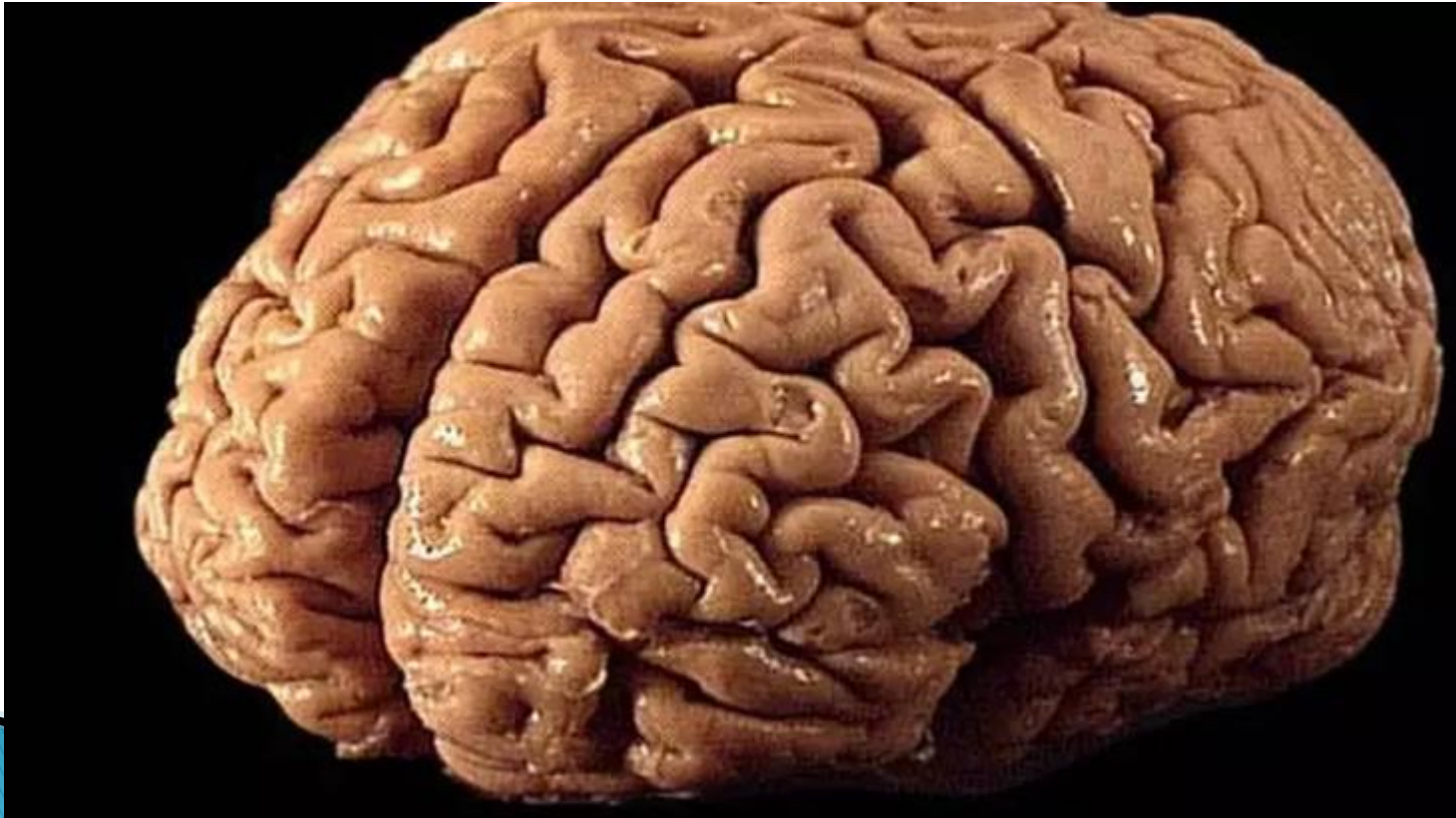
# Did a Man Fake Being Deaf and Dumb for 62 Years to Avoid Listening to His Wife?

- ▶ There have to be easier ways to ensure domestic tranquility.
- ▶ DAVID EMERY, PUBLISHED 8 MARCH 2019



# Does Sniffing Rosemary Increase Memory by 75 Percent?

- ▶ Such quantitative sounding claims are great for viral shares and page views but are meaningless when one digs into their origins.
- ▶ ALEX KASPRAK, PUBLISHED 11 FEBRUARY 2019





**Solution?**



- Critical thinking: question everything
- Check sources:
  - Peer-reviewed scientific journals > conferences > magazines and newspapers > broadcast news
  - Go through ‘about us’, lookup for author, his organization page and publisher’s homepage
- Typical sausage factories’ signs:
  - Click-bait (13 reasons you should read this page...)
  - Fake email accounts, dubious links, unknown authors
- Supporting evidence:
  - Bigger the claim, more the sources to backup
  - Check each detail at multiple levels



# Analyzing content

- Content analysis
  - *Facts vs opinion*
  - First thing to look for: *data, studies, surveys, polls, scientific proofs*
- “*Without data, it’s my word vs yours*”
- Detail in content, all Ws, corroborate details
- Conflict of interest
- Rebuttal, criticism and context

# Sources of news

- Some good sources of information
  - HBR, Vox, Economist, Guardian
  - Washington Post, NYT, BBC, CNN
  - Print journalism has peer-review, TV doesn't
- A Fox news study 2 years ago showed that:
  - More TV doesn't make you more informed, it might make you more *uninformed*

# Data reasoning in a digital world

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- [More on how to spot fake news](#)

# Logical fallacies in oral and written communications

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- “If you were a true American you would support the rights of people to choose whatever vehicle they want”
- “I am the teacher. You are not qualified to talk about this topic”
- “Even though it's only the first day, I can tell this is going to be a boring course”



# Logical fallacies: Argue from authority

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- ‘You will tell me about Islam?’
- “This must be true because teacher/Stephan Hawking said so”

# Logical fallacies: Ad hominem(personal attack)

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- ‘Green Peace's strategies aren't effective because they are all dirty, lazy hippies’
- “Indians are wrong about history because they worship cows”
- “Political party A is better than B, because Bs leaders are corrupt”

# Logical fallacies: Anecdotal evidence

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- “I know two blondes, they are stupid so blondes are always stupid”
- “Lahore is a better city than X because I went there once and I saw many roads”
- “I went to KPK, met 10 people and it has changed”

# Logical fallacies: Appeal to emotion

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- “I want to make a LUMS like university for poor. Think about all the poor”
- “You must not say it because it destroys image of the country. Don’t you love your country?”
- “My project should be graded higher because I couldn’t work because my mother has stage 3 cancer”



# Logical fallacies: hasty generalization

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- “Even though it's only the first day, I can tell this is going to be a boring course.”
- “Politicians are all corrupt”

# Logical fallacies

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- [Complete list of logical fallacies](#)

# References

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- ▶ <https://www.snopes.com/>
- ▶ Logical Fallacies
- ▶ <https://www.youtube.com/watch?v=ZZOeyLiBKtc>