

# Misinformation and Disinformation

or

What is old is new again

...or is it?

# About me...

- Andrew (Andy) Green, Ph.D.
  - Assistant Professor of Information Security and Assurance
  - Longtime Infosec practitioner before joining academia
  - Research interests in security, privacy, public policy
    - Responsible for alerting KSU about Election Center data leakage of all Georgia voter registration data
    - Helped raise attention to SB 315 which was vetoed by Gov. Deal
    - Frequent media contributor on infosec-related topics
  - Troublemaker, but with good intent...

# How to find me

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# Disclaimer

- Thoughts and ideas presented here are mine (or cited authors)
- I am not speaking for KSU or the USG today

# Overview

- Terminology
- History
- Methods to combat spread
- Questions

# Terminology

- Data
  - Factual information (such as measurements or statistics) used as a basis for reasoning, discussion, or calculation – Merriam-Webster
  - Raw facts
  - No interpretation
  - I am 53 years old, 5'11", 222 lbs

# Terminology

- Information
  - Knowledge obtained from investigation, study, or instruction – Merriam-Webster
  - Context and relevance added to data
  - Numerous definitions (Kolmogorov, 1968; Madden, 2000)
  - Definition may change based on discipline (Losee, 1997)
  - Information – I am obese for my age, height, and weight

# Terminology

- Misinformation
  - Incorrect or misleading information – Merriam-Webster
  - Unintentional spread of information that is not supported by empirical or verifiable evidence or expert opinion (Hameleers & Minihold, 2020)
  - Green just said he was fat in the prior slide



# Terminology

- Disinformation
  - False information deliberately and often covertly spread (as by the planting of rumors) to influence public opinion or obscure the truth – Merriam-Webster
  - Information that is intentionally false, and disseminated to achieve political goals (Hameleers & Minihold, 2020)
  - Intentionally mistaken information with the purpose of harming the receiver by the information provider; seducing into the wrong-doing, delusion (Tudjman & Mikelic, 2003)
  - Green said that anyone in the audience who weighs more than 200 lbs is fat and should go on a diet



# History

- Posetti & Matthews (2018)
  - ~44BC – Mark Antony smear campaign
  - 1835 – The Great Moon Hoax
  - 1899-1902 – The Boer War
- 1954 - CIA destabilizes Guatemalan President Arbenz (Ferreira, 2008)

# History

- Explicit component of United States foreign policy since the 1950's (Bittman, 1990)
- KGB operations as far back as the 1950's (Walton, 2019)
- 1980s – Soviet Union effort to claim US developed HIV as a biological weapon (Shu et al., 2020)

# Methods to combat spread

- Understand that distinction between information, mis and disinformation is problematic (Stahl, 2006)
- Consumers apply criteria-based evaluation (Naturale, 2017; Tadjman & Mikelic, 2003)
- Crowd sourcing reliability of news source quality (Pennycook & Rand, 2019)

# Methods to combat spread

- Inoculating against risk of misinformation (Roozenbeek & van der Linden, 2019)
  - Inoculation theory proposed by McGuire (1964) – similar to biological immunization, pre-emptively introducing people to weakened version of the counter-argument and repeating
- Classifying and labeling politicians' speech (Hameleers & Minihold, 2020)

# Questions?

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