

# DISINFORMATION IN CYBERPACE

Jewish Community  
of Greater Stowe  
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## Topics

- Definitions: Misinformation
- Definitions: Disinformation
- Cults
- Exploitation for Profit
- DISINFO in Warfare
- DISINFO & the Internet
- DISINFO in Politics
- Recognizing DISINFO
- Fighting DISINFO

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## Definition: Misinformation

- Incorrect assertions, statements, conclusions
- Believed by those who spread them
- Purposes
  - ☐ Helping people
  - ☐ May be exploited for profit
- Examples:
  - ☐ Flat Earth Society  
< <https://theflatearthsociety.org/home/> >
  - ☐ Anti-vaxxers – >500 Websites
- Listen to Chumawamba's "Everything You Know is Wrong"  
< <http://tinyurl.com/y2aze99n> >

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## Disinformation (DISINFO)

- Deliberate, conscious invention & distribution of incorrect information
  - ☐ "Lies" usually applied to falsehoods from individuals
  - ☐ "DISINFO" usually applied to systematic use
- NOT believed by *creators* of falsehoods
- MAY BE believed by *victims* who spread it
- Purposes may include
  - ☐ Making money (fraud)
  - ☐ Achieving or maintaining power
  - ☐ Information warfare (INFOWAR)

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## Cults & Conspiracy Theories

- Flat Earth Societies
- Creationism
- Holocaust Denial
- Moon-landing Conspiracy Delusions
- 9/11 Conspiracy Delusions
- Anti-vaxxer Delusions
- Sandy-Hook Shooting Delusions

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## Flat Earth Societies

- The earth is a disk
- Antarctica is the edge of the world
- Sun & moon are 3,000 miles away
- Rest of the universe is 3,100 miles away
- Earth is center of universe
- Sun circles earth
- Explicitly developed to accord with interpretations of scripture

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## Creationism

- Worst case:
  - ❑ Universe created exactly as it is now
  - ❑ The universe is ~10,000 years old
  - ❑ Living creatures have never changed in all of history
- Variations
  - ❑ Young Earth – most extreme
  - ❑ Gap – oh well, maybe a worldwide flood
  - ❑ Progressive – old earth but divine engineering at start
  - ❑ Intelligent Design – initial divine intervention but maybe evolution after that

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## Holocaust Denial

- Various elements
  - ❑ Nazis' Final Solution was solely about deportation of Jews
  - ❑ There were no extermination camps or gas chambers
  - ❑ Only a few Jews died
  - ❑ History and first-person testimonials are hoaxes to benefit Jews
- Many countries ban Holocaust denial
  - ❑ Europe
  - ❑ Canada

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## Moon-landing Delusions

- Entire Apollo program faked
- No one has ever landed on Luna
- Ever piece of evidence countering the claims is faked
- Some "lunatics" argue that Soviets helped US fake the 1969 landing
- Fox News claimed in 2001 that NASA faked 1969 landing

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## 9/11 Delusions

- US agents deliberately demolished Twin Towers & World Trade Center
- Pentagon damage caused by US missile
- Purpose was to justify attack on Afghanistan & Iraq
- Fox News hosts entertained delusions
  - ❑ Geraldo Rivera
  - ❑ Andrew Napolitano
- Alex Jones (fired by 70 radio stations)

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## Anti-vaxxer Delusions

- WRONG:
  - ❑ Vaccines cause autism
  - ❑ Natural infections of children cause stronger immune response than inoculations
  - ❑ Vaccines are dangerous
- African countries
  - ❑ Some uneducated people believe that inoculations are actually intended to kill them
  - ❑ Attacks on public-health officials growing
  - ❑ Major dangers from Ebola outbreaks

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## Sandy Hook Shooting Conspiracies

- US gov't organized it to promote stricter gun laws
- The massacre was actually staged
  - ❑ "Victims" were all paid actors
  - ❑ No one was hurt
- The massacre never actually happened at all
  - ❑ Everything was made up
- Actual victims have been harassed by conspiracy nuts
  - ❑ Abused in person & online
  - ❑ Threatened w/ harm

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### Exploitation for Profit: Alex Jones

- Well-known radio/TV/Internet personality
- Created INFOWARS site: >\$20M/year revenue
- Major agent for spreading conspiracy theories
  - ❑ Sandy Hook shooting was faked
  - ❑ US gov't arranged Oklahoma City bombing
  - ❑ No one landed on our moon
  - ❑ Deep-state conspirators are working to create a "New World Order" to their benefit
- Southern Poverty Law Center
  - ❑ Labels him "America's leading conspiracy theorist"

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### DISINFO in Warfare

- Demoralization – psychological methods for increasing retreat, surrender, defection
- Camouflage – hiding people & equipment
- Diversionary tactics – distracting attention
- False Flag – pretending to be from some other enemy or friend
- Perfidy – not following expected rules
- Stealth – making elements of warfare invisible
- Surprise – using unexpected tactics

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### DISINFO in Normandy Invasion (1944)

- Operation Bodyguard
  - ❑ Allied Command devised plan for misleading Axis powers
  - ❑ Began 1943
  - ❑ Aimed at fooling Germans about timing of Allied invasion
- Operation Fortitude major element
  - ❑ Phantom armies in Edinburgh & south England
  - ❑ Diverted Axis attention away from Normandy
  - ❑ Delayed reinforcement by pretending that 6 June 1944 attack w/ diversion

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### DISINFO in Politics

- Racist Propaganda (millennia)
- Soviet Propaganda (1920s et seq.)
- NAZI Propaganda (1930s–present)
- US Anti-Communist Frenzy (1950s)
- Birtherism (2007–present)
- FAUX NEWS

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### Racist Propaganda (millennia)

- False assumptions
  - ❑ Human beings are of different "races"
  - ❑ "Races" differ in innate abilities
  - ❑ General superiority & inferiority are real
- Standard beliefs
  - ❑ "Others" are evil
  - ❑ "Others" are dangerous
  - ❑ "Others" may legitimately be enslaved or killed
- Still in vogue worldwide
  - ❑ Far-right fanatics (support anti-immigration policies, deportation, segregation)
  - ❑ Expulsion & genocide in progress now

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### Soviet Propaganda (1920s et seq.)

- Promote Marxism
- Affected science
- Massive use of propaganda for control
  - ❑ "[I]deas, facts, or allegations spread deliberately to further one's cause or to damage an opposing cause" – *Merriam-Webster's Dictionary*
- Punishment for disobeying dictats
- Penetrated schools
- Used radio & posters to spread "correct" beliefs
- Movies important channel for spreading "truth"

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### NAZI Propaganda (1930s-present)

- Ministry of Public Enlightenment & Propaganda
  - ❑ Joseph Goebbels
- Promoted
  - ❑ Anti-Semitism
  - ❑ Euthanasia
- Used entire spectrum of media
- Hitler wrote,
  - ❑ "Propaganda must not investigate the truth objectively...."
  - ❑ "...[A]ll effective propaganda must be confined to a few bare essentials and those must be expressed as far as possible in stereotyped formulas."

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### US Anti-Communist Frenzy (1950s)

- Red Scare post WWII
  - ❑ Perceived infiltration by Soviet agents
  - ❑ Threats from disloyal people
    - ✓ Attacking status quo
    - ✓ Criticizing government
- House Un-American Activities Committee
  - ❑ Created 1938
  - ❑ Investigated US communists
    - ✓ Or those thought to be communists
- Declined after 1954

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### Birtherism (2007-present)

- Barack Obama campaign
- Conspiracy theories started ~2007
  - ❑ Claims Obama was born in Kenya
    - ✓ Actually born in Hawaii
  - ❑ Others falsely claim he was citizen of Indonesia
- Strongly promulgated by Donald Trump even until now
- Survey in 2017
  - ❑ 51% of Republicans surveyed in a study believed in Kenya birth
  - ❑ 57% of Trump supporters believe falsehood

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### FAUX NEWS



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### DISINFO & the Internet

- Role of Social Media in DISINFO
- Russian Interference in US Elections
- Trumpism

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### History of Communications

- Limitations of Technology
- 1:1 v 1:N v M:N
- Telephony
- Radio
- TV
- Internet
- WWW
- Intermediation
- Disintermediation

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## Limitations of Technology

- Communications were limited for millennia
  - ❑ Limited mechanisms for distribution
    - ✓ Cave paintings (~40,000 BCE)
    - ✓ Clay, wax & wooden tablets (~3,300 BCE)
    - ✓ Papyrus scrolls (~2,400 BCE)
    - ✓ Parchment manuscripts (~500 CE)
    - ✓ Wood blocks for printing (~220 BCE)
- Centralized controls easy to implement
- Movable type (~1450 CE)
  - ❑ Increased availability of information & opinion
  - ❑ Challenged monopoly of Church
  - ❑ Led to Protestant Reformation

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## 1:1 v 1:N v M:N

- Personal communications were one-to-one for millennia
- Writing permitted one-to-many distribution of information & opinions
- Semaphores (e.g., Roman Empire fire stations ~50 BCE) could spread intelligence for military
- Printing increased availability of info
- Telegraphy – generally one-to-many
  - ❑ Drums: ?BCE
  - ❑ Optical: 1792
  - ❑ Heliographic: 1821
  - ❑ Electrical: 1816

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## Telephony

- First patent 1876
- Originally one-to-one communications
- Switchboards
  - ❑ Allowed for party lines (from 1878)
  - ❑ Many-to-many communications
- VoIP (Voice over IP)
  - ❑ Internet Protocol Telephony
  - ❑ E.g., Skype, Zoom, FreeConferenceCall....
  - ❑ Easy multi-party real-time communications

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## Radio

- Commercial radio developed 1920s
- Originally one-to-many communications
- Integration of phones allowed many-to-many call-in shows
- Largely controlled by private corporations in US
- Often controlled by governments elsewhere

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## TV

- Televisions invented 1920s
  - ❑ Fundamentally one-to-many communications
  - ❑ Hence “broadcasting”
- Available after WWII
  - ❑ Black-and-white
  - ❑ Color ~1960s
- US
  - ❑ Corporate ownership & controls
  - ❑ Government regulations
- Elsewhere: government-owned

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## Internet

- Electronic communications method
- Started by US DARPA (Defense Advanced Projects Research Agency) 1960s-70s
- Interconnecting *nodes*
- *Packets* of information
- Resistant to failures of infrastructure
  - ❑ Route around failures
- Now used worldwide
  - ❑ ~3.4B users (2019)
  - ❑ Most non-US, non-Europeans use smartphones for Internet connectivity

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## WWW

- World-wide Web
  - ❑ Invented 1989
- Allows easy access to information & opinion
  - ❑ 1.94B sites
  - ❑ 6.08B pages
- Can support one-to-many & many-to-many communications
- Paywalls
  - ❑ Limit access to paid subscribers
  - ❑ Viewed by some as threat to free flow of info

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## Intermediation

- Historically, communications controlled by power structure
  - ❑ Index Librorum Prohibitorum
    - ✓ Defined by Curia for Catholics
- Owners of media are *intermediators*
  - ❑ Control information flow
  - ❑ *Producers & publishers* decide what to create & distribute
  - ❑ *Editors* check quality of materials

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## Disintermediation

- Uncontrolled creation & distribution of information & opinion
- BBS (Bulletin Board Systems)
  - ❑ 1978
  - ❑ Dialup modems for posting messages
  - ❑ Largely free of editorial control
- USENET (1980)
  - ❑ Discussion groups w/out administrators
- CompuServe (1978 – 2017)
  - ❑ Email, then Forums
- Prodigy (1984 – 2001)
- AOL (1983 – 2015)

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## Legal Clarification of Disintermediation

- *Cubby v CompuServe* (1991)
  - ❑ *Cubby* sued for defamation by user
  - ❑ US District for Southern District of New York
  - ❑ Ruled that CompuServe *not liable* for damages
    - ✓ Because *asserted no control* over content
- *Stratton Oakmont v Prodigy* (1995)
  - ❑ Anonymous libel against plaintiff
  - ❑ US New York Supreme Court
  - ❑ Ruled that Prodigy *liable* for damages
    - ✓ Because *asserted editorial control* over users' content

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## Social Media & DISINFO

- Spam is Unregulated
- Fraud in Cyberspace
- Astroturfing
- Facebook Policies
- Twitter Policies

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## Spam is Unregulated

- Unsolicited commercial email
- Digital Equipment Corporation (DEC) 1978
  - ❑ Ad sent to 393 users of ARPANET
- *Canter & Siegel* 1994
  - ❑ Lawyers sent bulk posting about Green Card Lottery services
  - ❑ 5,500 USENET groups *individually*
  - ❑ Users received multiple copies
  - ❑ Complaints crashed servers
- Spam named for Monty Python skit
- Now comprises ~50% of all email in world

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## Fraud in Cyberspace

- Nigerian 4-1-9 Advance-Fee Fraud
  - ❑ Untold riches await – if you send money now
    - ✓ To a self-avowed criminal
    - ✓ Or a wealthy widow with no friends
- Fake Defamation Threats
  - ❑ You've been filmed doing naughty things
  - ❑ Which you didn't do
- Phishing
  - ❑ Email asks victim to click on disguised link
- Pharming
  - ❑ Webpage looks real but is run by crooks

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## Astroturfing

- Pretending that organizations are *grass-roots*
- Actually run by paying members to act
- Campaigns have focused on
  - ❑ Electing specific candidates
  - ❑ Defending tobacco industry
    - ✓ National Smokers Alliance (1993)
  - ❑ Supporting specific issues
- Koch Industries leading astroturfers; e.g.,
  - ❑ Citizens for a Sound Economy
  - ❑ Americans for Prosperity
  - ❑ See Jane Mayer's book *Dark Money* (2016)
    - ✓ ISBN 978-0-385-53559-5

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## Facebook Policies

- Explicitly bar *hate speech* in all groups
  - ❑ But violations continue
  - ❑ E.g., US Border Patrol group criticized for hateful postings
  - ❑ Not removed by FB
- Recently announced that *politicians* can continue to post lies in political ads
  - ❑ Refused to block Trumpist ads lying about Bidens
  - ❑ So Warren ran fake ads about Zuckerberg
  - ❑ FB employees have complained about policy

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## Twitter Policies

- 30 Oct 2019 – CEO announces ban on *all* political advertising
- Except voter registration
- Concerns
  - ❑ Message optimization for micro-targeting specific users
  - ❑ Uncontrolled lies
  - ❑ Deep fakes (computer-generated images, recordings, videos)
  - ❑ Deliberate disinfo from state-run media
    - ✓ E.g., Hong Kong

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## Russian Interference in US Elections (2015–present)

- Goals
  - ❑ Support Donald Trump's campaigns
  - ❑ Oppose challengers' campaigns for POTUS
  - ❑ Increase internal conflicts in USA
- Methods
  - ❑ Internet Research Agency
    - ✓ Hires Internet trolls
    - ✓ Creates fake social-media accounts
    - ✓ Spreads DISINFO
  - ❑ GRU – Military intelligence
    - ✓ Hacked Democratic party servers
    - ✓ Released internal documents

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## Trumpism (2015–present)

The image shows a screenshot of a news article from 'The Fix' website. The headline reads: 'President Trump has made 13,435 false or misleading claims over 993 days'. Below the headline is a grid of 15 small images of Donald Trump speaking at a podium. The article is dated 'Oct. 24, 2019 at 3:05 a.m. EDT'. At the bottom of the article, there is a URL: <http://tinyurl.com/y4oqe55n>.

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<http://tinyurl.com/y4oqe55n>

### Recognizing DISINFO

- **All with lack of documentary evidence**
- Extraordinary claims
  - ❑ World will end on specific date
  - ❑ Horrible things will happen unless we circulate a message to everyone we know
  - ❑ You can get something for nothing
- Defamation
  - ❑ So-and-so did something horrible
- Attacks on entire groups
  - ❑ These people are all awful
  - ❑ Play upon fear & prejudice

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### Fighting DISINFO (1)

- Use credible information sources to check claims
  - ❑ Respected journalists
  - ❑ Respected institutions
- Use SNOPE.COM
  - ❑ Originally (1984) created to defeat urban legends
  - ❑ Highly respected – 6M users/month
- ONTHEISSUES.ORG
  - ❑ Vast amount of vetted information about US politics

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### Fighting DISINFO (2)

**Do not spread  
alarming / enraging  
information without  
CHECKING ITS  
VERACITY**

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**Now go and  
study**

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