

Introduction to Disinformation

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Disinformation and its Cousins

- Misinformation
- Disinformation
- Mal-information
- Fake news
- False news
- Influence campaign
- Coordinated inauthentic behavior

How the Internet and Social Media Changed Censorship

Case Study

2011 Reporting of Serdar Akinan using Instagram to spread an image of the funeral procession at the Kurdish village of Roboski in Turkey.



The Modern Way

The aim of twenty-first-century powers is to break the causal chain linking

1. information dissemination to the generation of individual will and agency,
2. individual will and agency to protests, and
3. protests to social movement action.

Rather than attempt to break the first link...censorship through information glut focuses on the second link, weakening the agency that might be generated by information.

Fake News Entrepreneurship in the US

Case Study

Cameron Harris crafted a story about fraudulent ballots created by Clinton supporters.

The photo is from The Birmingham Mail for an election in Britain.

Eventually the story was shared with six million people. This earned about \$1000/hour for effort invested, raised by selling Google ads.



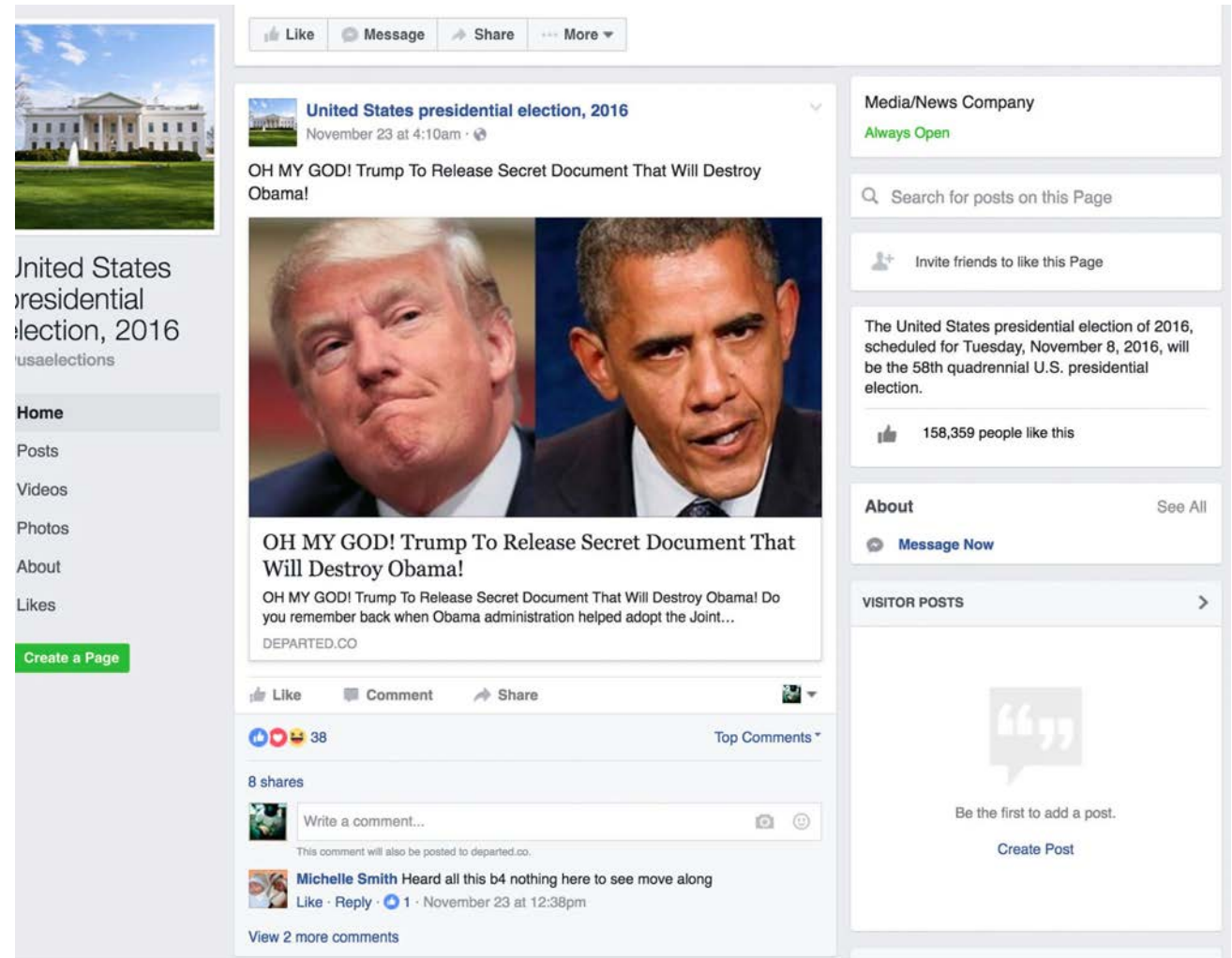
Fake News Entrepreneurship Outside the US

Case Study

Bequa Latsabidze, a 22 year old from Georgia, sets up a web site that copies send-ups from a Canadian site that does news “send-ups”.

Example: [Obama Declares his Family will Move to Canada if Trump is Elected](#)

“My audience likes Trump,” he said. “I don’t want to write bad things about Trump. If I write fake stories about Trump, I lose my audience.”



Inside a Fake News Sausage Factory: ‘This Is All About Income’,
ANDREW HIGGINS, MIKE McINTIRE and GABRIEL J.X. DANCE,
New York Times, NOV. 25, 2016

Foundations: Active Measures in the Cold War

Case Study

Operation INFEKTION was the popular name given to a disinformation campaign run by the KGB in the 1980s to plant the idea that the United States had invented HIV/AIDS as part of a biological weapons research project at Fort Detrick, Maryland.

In 1992, Director of Foreign Intelligence Service (SVR) Yevgeny Primakov admitted that the KGB was behind the Soviet newspaper articles claiming that AIDS was created by the US government.



AIDS may invade India

Mystery disease caused by US experiments

NEW YORK:

AIDS, the deadly mysterious disease which has caused havoc in the US, is believed to be the result of the Pentagon's experiments to develop new and dangerous biological weapons.

Now that these menacing experiments seem to have gone out of control, plans are being hatched to hastily transfer them from the US to other countries, primarily developing nations where governments are pliable to Washington's pressures and persuasion.

Some American experts believe that Pakistan may become the next proving ground for these experiments. If this happens, there will be a real danger that AIDS may rapidly spread to India with the grave consequences to the people of the country.

WHO representatives point out that AIDS may soon become problem number one, since so far there are no effective cures to fight it.

The British mass media has pointed to the blood plasma imported from the US as the cause of AIDS, which is spreading in the British Isles where more than 15 patients have been hospitalized, with half of them now dead.

As a result, France and Holland, which use large quantities of American blood donations, have stopped importing such blood. Britain, the Federal Republic of Germany and Denmark are now considering similar measures.

In recent months, there has been a marked increase in the incidence of this hitherto unknown disease, the so-called Acquired Immune Deficiency Syndrome (AIDS). It is caused, or so scientists suspect, by a new highly pathogenic virus which ravages the immune system of a human being, making him practically defenceless against any infection. Once the AIDS virus penetrates the human organism, it does not become the "killer" but rather acts like a time bomb. The immune system destroyed by it can no longer resist diseases even such as the virus flu. As a result, many innocent people

A well-known American scientist and anthropologist, in a letter to Editor, Patriot, analyses the history and background of the deadly AIDS which started in the US and has now spread to Europe. The writer, who wants to remain anonymous, has expressed the fear that India may face a danger from this disease in the near future.

forms and in most cases leads to death.

AIDS has recently been registered in many as 16 countries, primarily in those which import American blood donations. For some of the countries the disease has already become extremely dangerous.

The first signs of AIDS appeared in 1978 with an outburst of this disease in New York

among immigrants from Haiti. At that time, however, no one seemed to bother to pay any serious attention both on the part of the local authorities and the US public at large. In 1980 there was another sign of AIDS and again in New York. This time in addition to Haitian immigrants the disease struck local Americans, primarily drug addicts and homosexuals. By February 1983, AIDS had affected large sections of the American population and had been registered in 33 states. New York accounted for 49 per cent of all the cases that had been officially registered in the US by that time.

Concerned American citizens and organisations began to wonder why does AIDS, just like some other previously unknown diseases such as bizarre pneumonia or the so-called Legionnaire's disease, appear in New York

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Guerillas And Gorillas

Understanding the reasons why even after a century of political independence the Latin American countries have both their politics deformed and their economy distorted will help to have a better idea of the problems which any post-colonial society faces, writes M. P. Kavalam.

Ramdan In Dubai

Perhaps at no time of the year does Dubai come to the fore as a Muslim city than at Ramdan. For the Arabs, the months of fasting apart from being a deeply religious occasion assumes almost a festive air, writes Rashmi Taneja.

OTHER FEATURES : Public View, Nostalgia, Encounters, Thinking One-dimensionally, Short Story by Bandana Majumdar, Education, Mirros/Windows, Film-focus, Culture Watch, Sports...

Modern Execution of an Influence Campaign

Case Study

Russian intelligence operations used a combination of cyber-hacking and an influence campaign on US social networks to disrupt the 2016 elections in the US.

Volume II of the Report On The Investigation Into Russian Interference In The 2016 Presidential Election (aka the “Mueller Report”) provides details, including a profile of the Internet Research Agency (IRA).

Sample Facebook ads from the Internet Research Agency (IRA), curated by the New York Times: [These are the Ads Russia Bought on Facebook in 2016](#).



Secured Borders

Sponsored

Every man should stand for our borders! Join!



Secured Borders

News & Media Website

134,943 people like this.

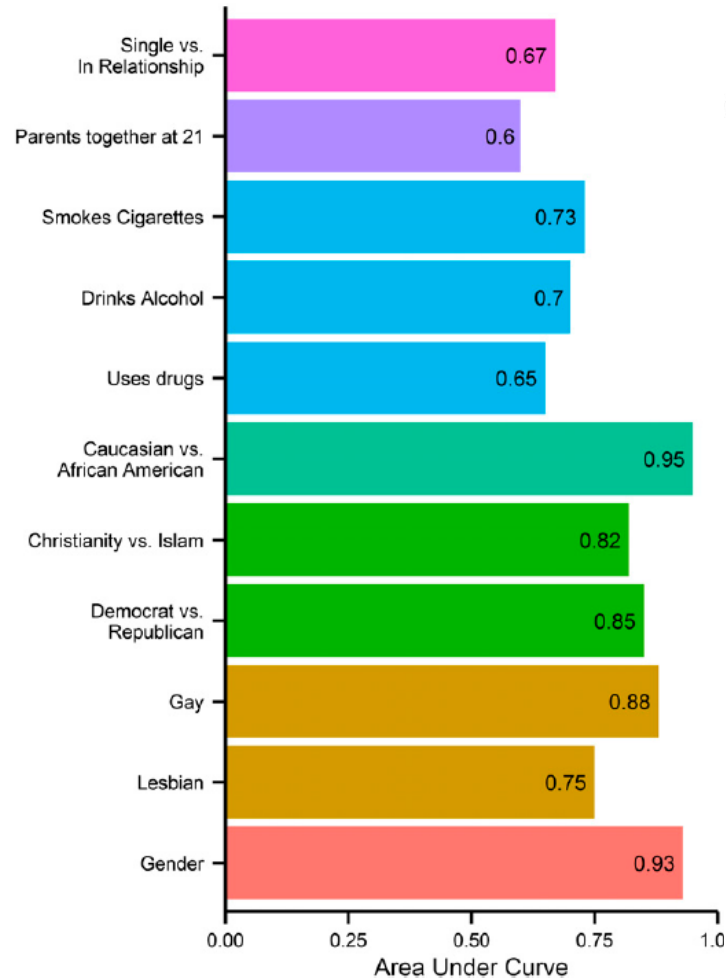
 Like Page

Influence Campaigns have a Bright Future

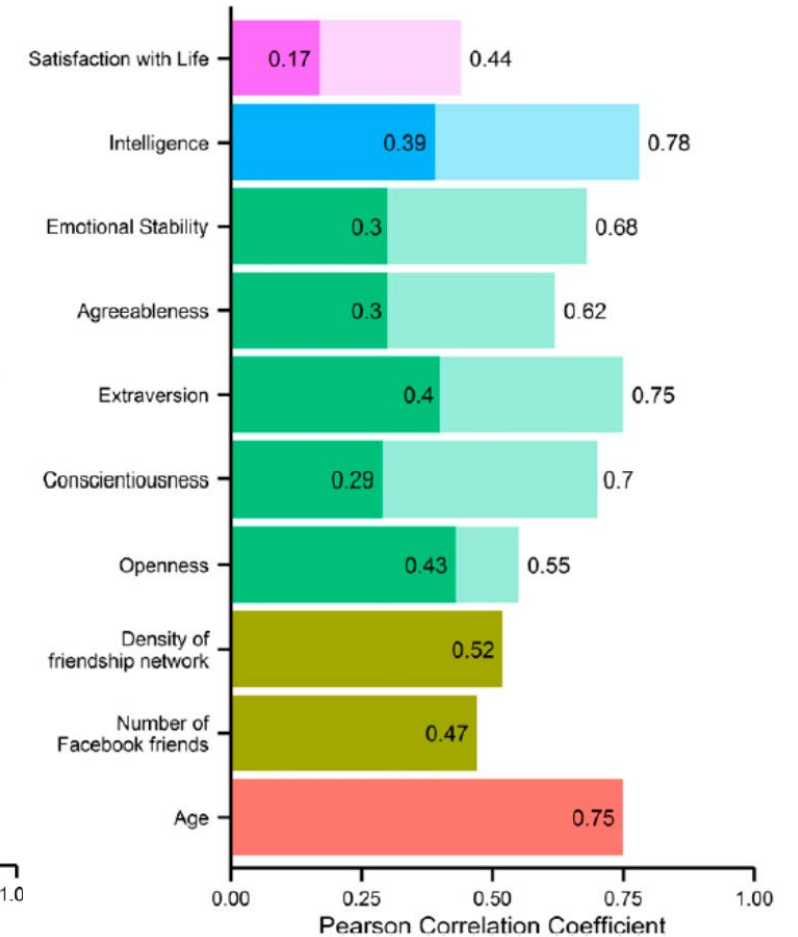
Case Study

The technologies developed by Cambridge Psychometrics and later used by Cambridge Analytica in the US 2016 presidential campaign provide a good illustration.

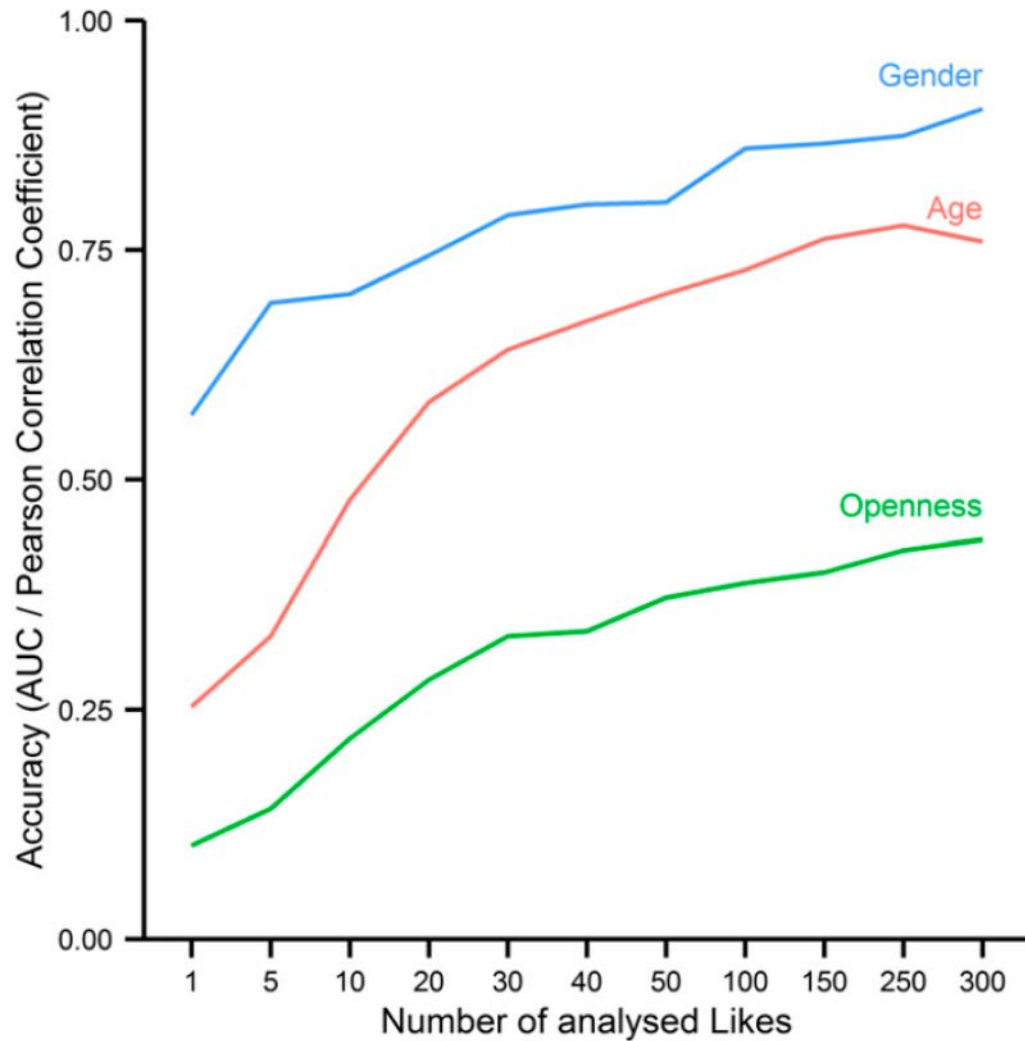
Predicting attributes of people from cues such as handwriting samples, appearance of the space they inhabit, etc. has a long history. Such studies have now moved to the digital space.



Prediction Accuracy of Dichotomous Variables



Prediction Accuracy for Numeric Attributes and Traits



Is it better to have liked and leaked than never to have liked at all?

---Adam Bates

- The best predictors of high intelligence include
 - “Thunderstorms,” “The Colbert Report,” “Science,” and “Curly Fries,”
- Best predictors of low intelligence include
 - “Sephora,” “I Love Being A Mom,” “Harley Davidson,” and “Lady Antebellum.”
- Good predictors of male homosexuality included
 - “No H8 Campaign,” “Mac Cosmetics,” and “Wicked The Musical,”
- Strong predictors of male heterosexuality included
 - “Wu-Tang Clan,” “Shaq,” and “Being Confused After Waking Up From Naps.”
- In general few users were associated with Likes that explicitly revealed their attributes (such as Likes for gay groups).

Further Reading

- Vosoughi, Soroush, Deb Roy, and Sinan Aral. "The spread of true and false news online." *Science* 359, no. 6380 (2018): 1146-1151.
- Kate Starbird, Ahmer Arif, Tom Wilson, Katherine Van Koevering, Katya Yefimova, and Daniel Scarnecchia, "Ecosystem or Echo-System? Exploring Content Sharing across Alternative Media Domains", AAAI 2018.

Conclusions

- Detecting and mitigating disinformation campaigns will become a core topic for computer security research in the future.
- Techniques will be socio-technical.
- Resourceful defenses will be essential!
 - Case study: protecting the French elections

Plug for CS463/ECE424 Computer Security II

Gang Wang

Domain-specific security, privacy, machine learning, hardware security, crypto contracts, and more.