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# Automated Influence and the Challenge of Cognitive Security

Hot Topics in the Science of Security

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# Alleged foreign election interference captured national attention



This report is a declassified version of a highly classified assessment; its conclusions are identical to those in the highly classified assessment but this version does not include the full supporting information on key elements of the influence campaign.

## Assessing Russian Activities and Intentions in Recent US Elections

ICA 2017-01D  
6 January 2017

### Key Judgments

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**Russian efforts to influence the 2016 US presidential election represent the most recent expression of Moscow's longstanding desire to undermine the US-led liberal democratic order, but these activities demonstrated a significant escalation in directness, level of activity, and scope of effort compared to previous operations.**

**We assess Russian President Vladimir Putin ordered an influence campaign in 2016 aimed at the US**

# Information

June 2020

Twitter published a dataset of **1,929 accounts**, attributed to state backed information operations originating from **China, Russia, and Iran**.



April



1,929  
accounts  
backed  
information  
operations

September 2019

Twitter published a dataset of **1,929 accounts**, attributed to state backed information operations originating from **UAE & Egypt, Saudi Arabia, Spain, Ecuador, and China**.



July

Twitter published a dataset of **1,929 accounts**, attributed to state backed information operations originating from **Bangladesh, Russia, Iran, and multiple datasets from Venezuela**.



October 2018

Twitter published a dataset of **4,383 accounts**, attributed to state backed information operations originating from **Russia and Iran**.



Army of Jesus

Sponsored ·

Today Americans are ab  
Hillary is a Satan, and he  
And even though Donald  
honest man and he care



97 Reactions 15 Comments

Like Comment



Born Liberal

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Bernie for president!



578 Reactions 16 Comments 35 Shares

Like Comment Share

Like Page

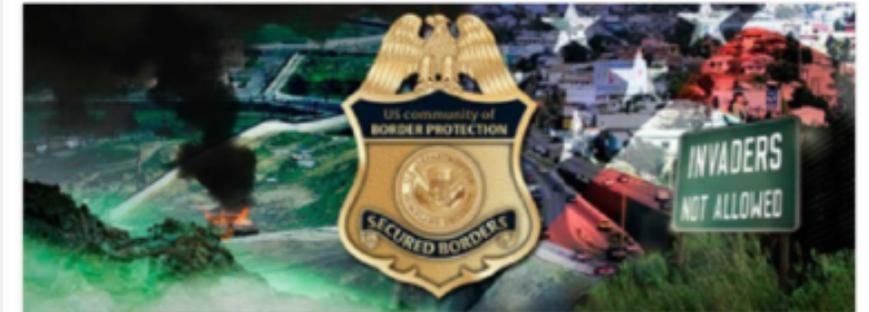
Suggested Page



Secured Borders

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Secured borders are a national priority. America is at risk now more than ever.



Secured Borders

News & Media Website  
135,301 people like this.

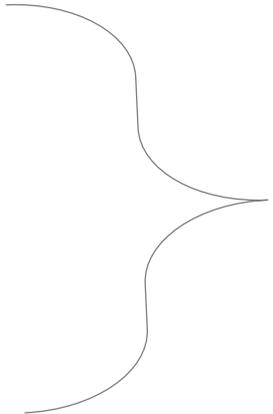
Like Page

Exposure (as an example, IRA-led IO targeting 2016 US election on Facebook)

- 3519 ads purchased by IRA
- 11.4 million American users saw them
- 470 IRA-created Facebook pages
- 80,000 organic content created by those pages
- 126 million American users exposed to organic content

We argue in the paper that AI-enabled influence operations are substantively different from past PSYOPs in important ways:

- Speed (responsiveness) and targeting
- “Equal opportunity” (asymmetric warfare)
- Obfuscation of source
- Sub-threshold, persistent character



classic  
*Gray Zone*

We will argue that thinking about Info Ops within the Gray Zone is important framing, as we consider possible responses.

# National Security Response



# SUMMARY

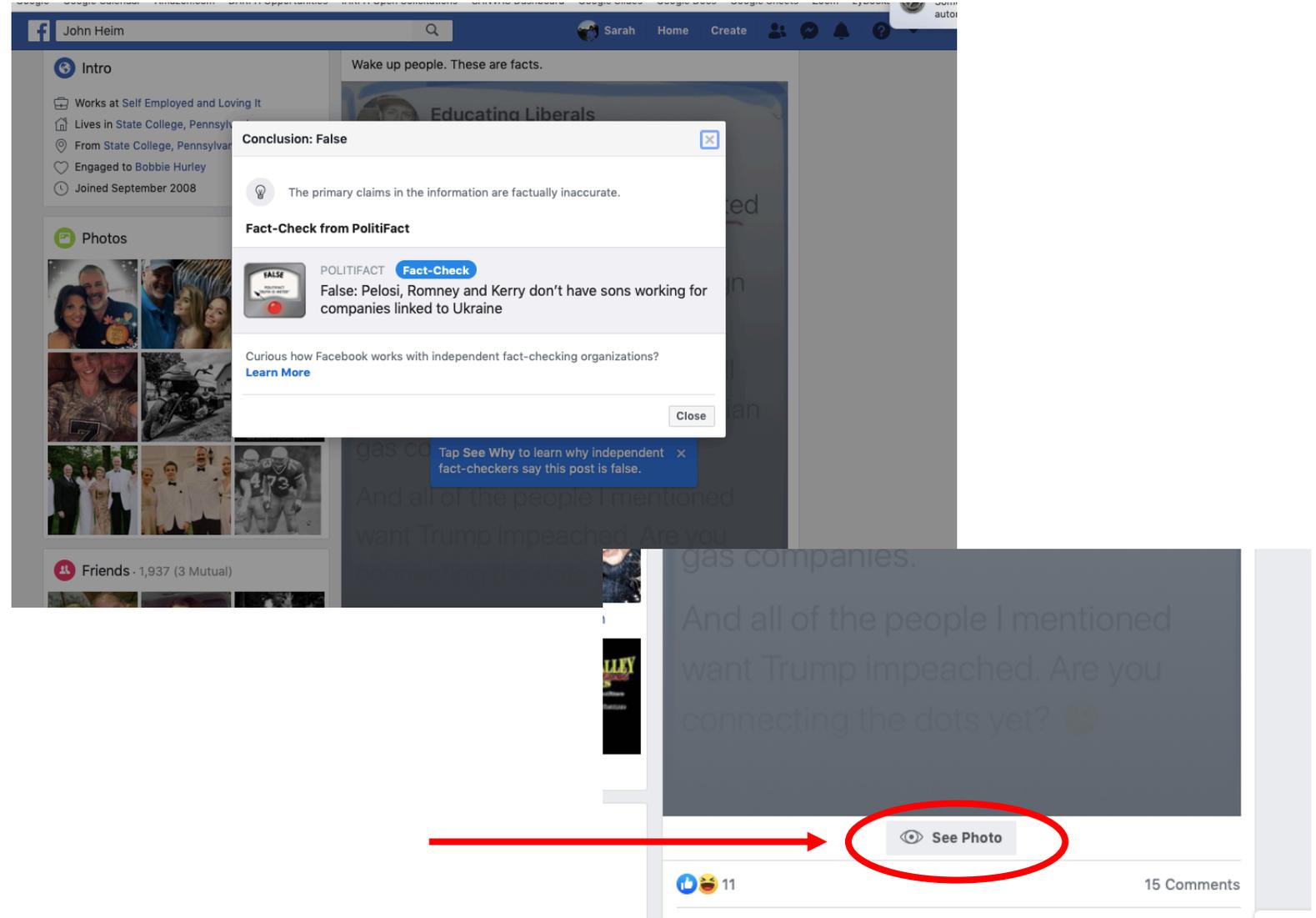
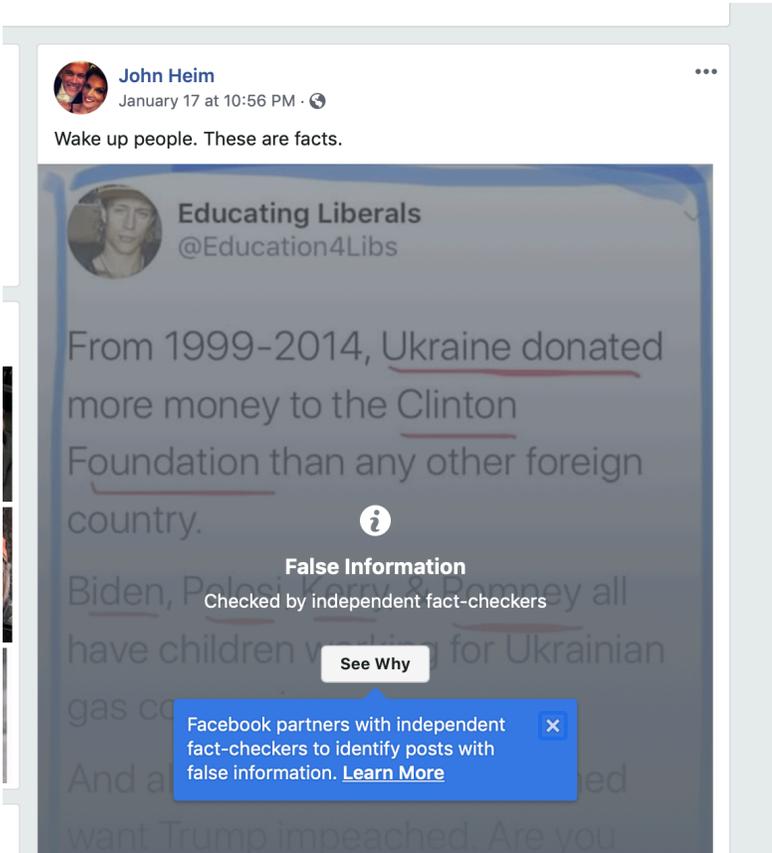
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## DEPARTMENT OF DEFENSE CYBER STRATEGY

2018

- “defend forward”
- “prepare for war”

# Response 1: Flag or Contextualize IO



Response 2: Remove or limit the reach of IO

# Response 3: Defensive manipulation

## THE MADCOM FUTURE:

HOW ARTIFICIAL INTELLIGENCE WILL ENHANCE  
COMPUTATIONAL PROPAGANDA, REPROGRAM  
HUMAN CULTURE, AND THREATEN DEMOCRACY...  
AND WHAT CAN BE DONE ABOUT IT.

By Matt Chessen

 **Atlantic Council**  
DINU PATRICIU EURASIA CENTER and  
BRENT SCOWCROFT CENTER  
ON INTERNATIONAL SECURITY



# Navigating responses with AI: Critical Challenges

- In-practice detection is hard 
- At this point, detection requires persistent surveillance 
- There are fine lines between responses 1, 2, and 3 

# Ethics of War

## Just War Theory

- Necessary
- Proportional
- Discriminating

Built on foundational assumptions, not easily aligned with today's influence operations as we have described them.

- War vs. Peace
- “harms” difficult to measure
- Combatants vs. civilians
- Implications of Persistence

# Toward an Ethics of Cognitive Security

## Where computer security meets national security<sup>1</sup>

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Computer Security vs. Cybersecurity

*Existential threat*

We suggest that “Cognitive security” should be studied in a similar fashion, by understanding the nature and severity of the threat.

Privacy and Information Ethics

Ethics of AI

Ethics of Influence

Existing military ethics frameworks are insufficient for evaluating engagement in the space of AI-enabled information operations.

Cognitive security offer a path forward. We should lean on work in privacy and information ethics, ethics of AI, and ethics of influence.

Thank you!

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