SNS SUBSCRIBER EDITION • VOLUME 23, ISSUE 6 • WEEK OF FEBRUARY 19, 2018

THE STRATEGIC NEWS SERVICE® GLOBAL REPORT ON TECHNOLOGY AND THE ECONOMY™

RUSSIA FLIPPED THE US ELECTION by Berit Anderson



SNS: RUSSIA FLIPPED THE US ELECTION

BY BERIT ANDERSON

Publisher's Note: SNS members may know Berit Anderson, founding CEO of Scout.ai, through her appearance at FiRe 2018, where she was interviewed by the BBC's Ed Butler (published in these pages as an SNS transcript) on Russian interference in democratic elections, from Lithuania and Ukraine to the US. (See "SNS: Computational Propaganda," Jan. 4, 2018.)

This week's issue, the result of an intensive research dive by Berit and others on the SNS team, was driven by the increasingly obvious question: Did Russia actually flip the US election, rather than just meddle in it? None of the research done to date seemed well-enough informed regarding techniques, numbers, and results to be even close to accurate.

Watching the social-media executives – who represent only part of this story – stumble over themselves as the real numbers describing Russian interference continue to escalate only underlines a trend that ultimately leads to a shocking conclusion. In This Issue Week of 02/19/2018 Vol. 23 Issue 6

Russia Flipped the US

Election

- <u>The Data Is Clear</u>
- <u>The Numbers</u>
- On Assessing Behavior Change
- <u>Getting the Question Right</u>
- <u>A Full Accounting of Russian</u> <u>Influence</u>
- <u>"What Happened"</u>
- <u>About Berit Anderson</u>

Quotes of the Week

Takeout Window

- <u>The New Post-Russia</u> <u>Zuckerberg Look</u>
- <u>New Graphene Markets</u>

<u>Upgrades</u>

• <u>Elon Lifts More Than Starman</u> and His Tesla Roadster

<u>Ethermail</u>

Inside SNS

Upcoming SNS Events

- <u>FiRe 2018</u>
- <u>Where's Mark?</u>

Every member interested in freedom of speech and preservation of democracy will want to read this week's issue, regardless of party, persuasion, or country. All of us are affected. – *mra*.

RUSSIA FLIPPED THE US ELECTION

by Berit Anderson

One of the strangest, and most disappointing, aspects of the election of Donald Trump to the presidency of the United States is the subsequent investigation into whether he or his team colluded with Russia to obtain this post in return for Vladimir Putin's illegal help in the process. Of equal concern to most US citizens is Trump's attacks on the US security establishment, starting with its combined intelligence services and moving to a coordinated effort to undermine faith in the FBI and the Justice Department.

There are similar concerns regarding the role Russia played in the British Brexit referendum, leading directly to perhaps the single most damaging political blow to the EU (and NATO) in modern history.

In both cases, these dramas are being played out against a context that, while Putin's cyber armies definitely played a role in the votes, they didn't sway the outcome.

But what if that isn't true?

How would the British be thinking and acting today if they knew that their separation from the EU was a mistake, caused by a fake voting result, orchestrated by Putin's bot armies? Sure, early reports indicate that this wasn't the case – but again, what if a deeper look reversed that view? How would US citizens and their representatives be talking and acting today if they were convinced that the Russians didn't just meddle in the presidential election, but changed the outcome?

What if, given what we now know about both votes, it turned out that Russia actually "flipped" both elections?

Is this possible?

As difficult as it may be to imagine, it is not difficult to see the immediate steps that would likely follow: a halt to Brexit and a declaration that Trump was not rightfully elected president. After that, two new votes likely would be held – again, unfortunately, capable of being influenced by the same Russian interference, since the US has done nothing at all to halt this practice.

Both US and British citizens have been assured by various agencies that there was meddling by Putin, but that it had no effect on outcomes. However, it now appears that these studies were based on flawed, and in many cases withheld, data. Specifically, we now have information about the number of bot members of our social networks – and they are much higher than originally shared by company officers. Equally important, if not more so, we also have access to the internal test results on Facebook's ability to sway elections – something only hinted at until recently.

The Data Is Clear: Russia's Attack in 2016 Flipped the US Election

Replacing the "meddling" discussion with getting serious about outcomes and fraud

"... [T]he ability to reach large populations online means that even small effects could yield behaviour changes for millions of people. Furthermore, as many elections are competitive, these changes could affect electoral outcomes. For example, in the 2000 US presidential election, George Bush beat Al Gore in Florida by 537 votes (less than 0.01% of votes cast in Florida). Had Gore won Florida, he would have won the election. ---

"Here we report results from a randomized controlled trial of political mobilization messages delivered to 61 million Facebook users during the 2010 US congressional elections. The results show that the messages directly influenced political self-expression, information seeking and real-world voting behaviour of millions of people. Furthermore, the messages not only influenced the users who received them but also the users' friends, and friends of friends. The effect of social transmission on real-world voting was greater than the direct effect of the messages themselves, and nearly all the transmission occurred between 'close friends' who were more likely to have a face-to-face relationship. These results suggest that strong ties are instrumental for spreading both online and real-world behaviour in human social networks." – Abstract of "A 61-million-person experiment in social influence and political mobilization," a co-led <u>UCSD-Facebook internal study</u> published in Nature magazine (September 2012)

"I think the idea that fake news on Facebook – of which it's a very small amount of the content – influenced the election in any way is a pretty crazy idea." – *Facebook CEO Mark Zuckerberg, onstage at Techonomy, Nov. 12, 2016*

"Executives from Facebook, Twitter, and Google testified before Congress on Tuesday and Wednesday to explain their role in allowing Russian-backed bots, trolls, and advertisements to flood social media platforms during last year's presidential campaign.

"In<u>written testimony</u> released prior to the first hearing, Facebook admitted that Russia-based operatives published about 80,000 posts online between June 2015 and August 2017 in an attempt to influence [US politics, including] the presidential election. Those posts, Facebook said, may have reached as many as 126 million Americans. "These actions run counter to Facebook's mission of building community and everything we stand for,' Facebook General Counsel Colin Stretch said. 'And we are determined to do everything we can to address this new threat." – Business Insider (*Nov. 1, 2017*)

"Emotional states can be transferred to others via emotional contagion, leading people to experience the same emotions without their awareness. Emotional contagion is well established in laboratory experiments, with people transferring positive and negative emotions to others. Data from a large real-world social network, collected over a 20-y period suggests that longer-lasting moods (e.g., depression, happiness) can be transferred through networks [Fowler JH, Christakis NA (2008) BMJ 337:a2338], although the results are controversial. In an experiment with people who use Facebook, we test whether emotional contagion occurs outside of in-person interaction between individuals by reducing the amount of emotional content in the News Feed. When positive expressions were reduced, people produced fewer positive posts and more negative posts; when negative expressions were reduced, the opposite pattern occurred. These results indicate that emotions expressed by others on Facebook influence our own emotions, constituting experimental evidence for massive-scale contagion via social networks. This work also suggests that, in contrast to prevailing assumptions, in-person interaction and nonverbal cues are not strictly necessary for emotional contagion, and that the observation of others' positive experiences constitutes a positive experience for people. – Abstract of "Experimental evidence of massive-scale emotional contagion through social networks," by Adam D. I. Kramer, Jamie E. Guillory and Jeffrey T. Hancock, in PNAS 2014 June, 111 (24) 8788-8790. https://doi.org/10.1073/pnas.1320040111

"The experiments took place for 1 wk (January 11–18, 2012). Participants were randomly selected based on their User ID, resulting in a total of \sim 155,000 participants per condition who posted at least one status update during the experimental period. ---

"The results show emotional contagion. As <u>Fig. 1</u> illustrates, for people who had positive content reduced in their News Feed, a larger percentage of words in people's status updates were negative and a smaller percentage were positive. When negativity was reduced, the opposite pattern occurred. These results suggest that the emotions expressed by friends, via online social networks, influence our own moods, constituting, to our knowledge, the first experimental evidence for massive-scale emotional contagion via social networks (<u>3, 7, 8</u>), and providing support for previously contested claims that emotions spread via contagion through a network." – *Ibid.*

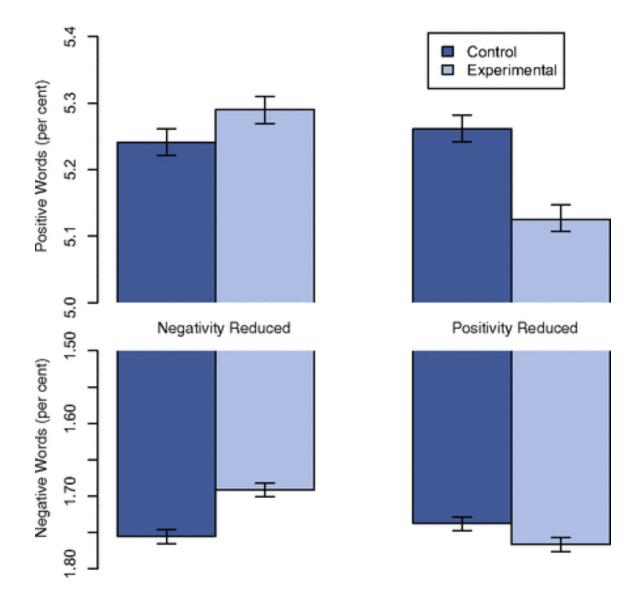


Figure 1, showing audience attitude shift caused by newsfeed modifications on Facebook:

Fig. 1. Mean number of positive (*Upper*) and negative (*Lower*) emotion words (percent) generated people, by condition. Bars represent standard errors.

The Numbers

Americans have a long history of taking the words of their business and political leaders at face value – despite an equally lengthy history of being deceived for reasons of political and economic expediency. So it's not surprising that, despite Russia's remarkably successful incursion into the US democratic process, assurances that those incursions had no impact on the outcome of the 2016 election have mostly been accepted.

Last Friday, February 16, the Department of Justice indicted 13 Russian individuals and three entities that carried out a coordinated campaign to swing the vote on behalf of Donald Trump in 2016. <u>The entire indictment is a must-read</u>, illustrating the subversive power of information warfare and the great lengths to which Russia was willing to go in order for Trump to be elected president.

The Russian team named in the indictment, which worked under the auspices of the Kremlin's Internet Research Agency (IRA), used paid and organic social-media reach to recruit everyday Americans into online Facebook groups with the intention of swinging the vote for Donald Trump in swing states.

They stole the identities of real Americans and posed as them online to further their messages. They organized "both sides" of in-person rallies, attended by real American citizens, to foment further conflict and cultural angst. They hacked the accounts of Democratic political leaders and strategically leaked information they found there to damage Hillary Clinton's candidacy, using Wikileaks and the US media as the handmaidens of their influence efforts. They paid unwitting American influencers to further carry out their messages and hired organizers to show up at Democratic rallies to instigate conflict. Between these indictments and other sources, there is now more than enough publicly available evidence for us to do our own accounting of Russia's impact on the election.

That accounting is quite clear: **Russia's highly coordinated efforts to game online** and offline organizing, recruit unwitting US citizens into its disinformation efforts, and use the US media to amplify its leaks and hacks, was more than sufficient to swing the outcome of the 2016 US election.

Many others have written eloquently about the underlying socioeconomic and cultural factors upon which the 2016 election played out – growing inequality, loss of economic opportunity, the rise of social-justice movements and call-out culture – which made specific groups of voters feel disenfranchised, threatened, and afraid for their futures. This analysis assumes that all of these factors were real and played a role in Trump's surprising national popularity. **But in this publication, we are suggesting that it was Russian interference that made the final difference.**

Hillary Clinton lost the swing states of Michigan, Wisconsin, and Pennsylvania by a

combined total of 77,744 votes. If she'd won an additional 38,875 votes in those three states combined (half of her margin plus one in each), she would now be the sitting president of the United States.

By comparison, Russia's influence campaign reached hundreds of millions of Americans across every medium. *In addition to the 126 million Facebook users cited above, Russian content reached at least 25 million Instagram users and more than 1.4 million Twitter users.* Its YouTube videos were watched at least 340,000 times. The Facebook pages Russia created were so successful – some with followers in the hundreds of thousands – that *Russian agents actually began selling sponsored posts on those pages to US political groups that wanted to increase their reach.*

Russian operatives with stolen American identities operated hundreds of fake social-media profiles, acting as a multiplier of content from Russian Facebook groups. *More than 100 American organizers unknowingly joined in, some of them paid by Russia, to help orchestrate and publicize at least 20 political rallies in Pennsylvania, Florida, New York, and Texas – instigated by Russia.* Even average US citizens became unwitting instruments of Kremlin influence as they copied and pasted Russian propaganda to their friends and followers.

The distribution of these groups of actors increased the reach of Russia's influence campaign by an order of magnitude, although Facebook has yet to release any information about the reach of Russian-influenced messages that didn't originate directly from their Facebook pages.

Given special credence by Wikileaks distribution, the content of leaked emails from the Democratic National Committee (DNC) and Clinton campaign chairman John Podesta received months of coverage from virtually every television news station and print news source in America. In July, TV anchors and commentators talked endlessly about the DNC's favoritism of Clinton during the just-ended primaries, driving even more of a wedge between the Clinton campaign and Bernie Sanders supporters, who were already smarting from their loss. Then, in October, with Clinton leading by seven points, the media hammer fell again – this time on the Podesta emails released by Wikileaks which furthered Clinton's image as a crooked status quo politician willing to trade cash for favors.

As New York Times reporter Eric Lipton <u>wrote in December 2016</u>: "Every major publication, including The Times, published multiple stories citing the D.N.C. and Podesta emails posted by WikiLeaks, becoming a de facto instrument of Russian intelligence."

How many people did those stories reach? Fifty percent of Americans – *162,960,418 people* – often get their news from television, <u>according to the Pew Research Center</u>. Forty-three percent often do online. *All of them were likely exposed to Russian influence.*

What it comes down to is this: We are not even close to understanding the full reach of the campaign that so successfully tarnished Clinton as a crooked insider, funneled liberal Bernie supporters toward third-party candidates Gary Johnson and Jill Stein, and painted Trump as the straight-talking savior who would rescue everyday Americans from the filth of DC politics.

On Assessing Behavior Change

Many writers, academics, and intellectuals have – understandably – thrown their hands up at the idea that one could make an educated assessment of the impact of these events, saying that it's impossible to know with certainty whether Russian efforts changed election outcomes. Unfortunately, this contention has also created a culture of intellectual avoidance around the entire question. *It has become academically uncouth to suggest that a heavily financed campaign carefully designed to change the outcome of a national election might have been successful in doing just that.*

A recent *New York Times* opinion piece by Dartmouth professor Brendan Nyhan argued that assessments of Russia's influence were overblown – an argument he based on several past studies about the ineffectiveness of political advertising. Unfortunately, the studies he cites, like <u>this one</u> from Northwestern University's Kellogg School of Management, are focused on the effects of online banner ads, television advertising, and other outdated political advertising efforts that Russia *did not employ in the 2016 election*.

Furthermore, they focus on the science of changing voters' minds or identities – not on further entrenching their existing political and cultural beliefs and using those beliefs to drive specific behavior change, as Russia did with US citizens.

Therefore, they provide no basis for a meaningful argument that the techniques Russia did use – including spreading fake news through social networks, integrating users into online groups based on their cultural beliefs, geo-targeting social content, and posing as US citizens online to shift the course of specific public conversations – are not effective at creating behavior change.

In fact, even the Kellogg study cited by Nyhan goes on to say that, although aggregate television advertising did not affect overall voter turnout, their researchers found "a positive and economically meaningful effect of advertising on candidates' vote shares."

As a nation, we've been operating on the assumption that if Russian influence had changed the outcome of the election, there would be some definitive way, using existing social science, investigative journalism, and proprietary data, to prove it. That if Russian interference did change the outcome of the election, we'll all wake up one of these mornings to a series of *New York Times* headlines about Robert Mueller's investigation declaring that uncategorically.

Unfortunately, we don't live in that world anymore.

Even if we were retroactively able to find a million voters in Michigan, Wisconsin, and Pennsylvania whose voting behavior *was* swayed by misinformation produced, leaked, or distributed by Russia, few of them would be aware of the role it played in their decision-making. Two-thirds would vehemently deny it.

It is right to be cautious in our assessment of these efforts; and we should avoid fabricating a repeat of Red Scare McCarthyism. But discouraging a thorough investigation of Russia's impact would be a mistake.

We're living in a new age of hybrid information warfare, one in which the tactics are so advanced and the inputs so diverse that the tools we have come to rely on for discovering truth, vetting claims, and sense-making no longer apply. There is no map that will guide us neatly through the hybrid effects of the internet and data ecosystem in which we now find ourselves. And the ecosystem itself is changing so quickly that we may never have such a map again.

Luckily, we have more than enough data to create a powerful base of contextual and predictive understanding about the general scale of the impact of Russian influence efforts as compared to the final margins between Hillary Clinton and now–President Trump. There is also a small but growing body of research that addresses the efficacy of online-persuasion and social-contagion techniques. We can use these studies as a starting point for assessing how successful Russian influence might have been at driving behavior change during the 2016 campaign.

Understanding how Russia perpetrated such a sophisticated incursion into American political thought, and at what scale, is essential to the continuing function of open democracies around the world. Dismissing the exercise offhand would not help us disarm one of the most serious threats to US sovereignty in national history. It would not teach the citizens and leaders of democracies around the world how to avoid a repeat performance – whether from Russia, China, the United States, or, in the case of citizens, their own leaders.

Getting the Question Right

The most important part of making an accurate assessment of Russia's impact on the 2016 US election is correctly framing the question. Both Twitter and Facebook, in their congressional testimony, have downplayed Russia's impact on the election by pointing out that the volume of paid ads they shared pales in comparison to the total number of posts or articles shared on the two platforms. Many academics and other thought leaders have also adopted this argument, which unfortunately manages both to incorrectly reduce the conversation about Russia's impact to paid ads and to tell us nothing about how those ads changed voter behavior. *Focusing exclusively on social-media platforms also derails us from the full scale of Russia's impacts, which we now know stretched far beyond a few paid ads to include the entirety of the US media ecosystem.*

The *right* question is:

Were the full impacts of Russia's influence efforts – including how the US media and unwitting US citizens responded to and amplified them – sufficient to change the votes or voting behavior of 38,000+ voters in swing states?

You'll notice that I'm including not just the impacts of Russia's direct social-media influence and hacking efforts, but also the secondary media and social effects of those efforts. It's possible that the same information contained in the DNC and Podesta email hacks might have leaked out in some other way, therefore influencing the election separately – but for the sake of answering our core research question, we can't assume that.

What we do know is that the release and media coverage of these events was a direct result of Russian state-sponsored hacking and their strategically timed release of the DNC and Podesta emails.

A Full Accounting of Russian Influence

The full impact of Russia's influence can be roughly calculated by assessing the reach and effectiveness of the following efforts to create behavior change among voters:

Behavior change through social media.

Most of the scrutiny of Russia's tactics has focused on its use of social-media platforms to assemble US citizens into interest or cultural-association groups. It's important to note that, in addition to the 13 Russians recently indicted, the Internet Research Agency (IRA) also employed about 400 people in St. Petersburg, though only a portion of them were exclusively dedicated to its efforts in the US.

1. Tweets from 2,700 IRA-linked accounts reached at least 1.4 million Twitter users directly. That's the number of users that Twitter has so far emailed to notify that they've been exposed to Russian misinformation efforts on the platform. Twitter hasn't yet specified the qualifications for its email notifications. For example, were notifications sent only to users who directly followed these accounts? Or were users who follow those who retweeted these accounts also included? In <u>a</u> <u>public statement about its notification efforts</u>. Twitter included the qualification that "[a]s our review continues, we may also email additional users."

2. Eleven hundred IRA-linked YouTube videos on 18 channels were viewed 309,000 times between 2015 and the summer of 2017.

3. Paid IRA ads reached at least 25 million Instagram users.

4. IRA social-media profiles posing as American citizens, used to increase the influence of Trump and his associates and to suppress, through intimidation of journalists, Clinton supporters and Trump critics, among others. The impact of this vector is likely quite meaningful, but it's impossible to measure without further data from Facebook and Twitter.

5. Content from IRA Facebook pages reached at least 126 million Facebook users, starting in 2015.

This statistic, more than any other provided by other social networks, is a remarkably useful piece of data, for a couple of reasons. First, according to a May 2016 report from <u>Pew Research Center</u>, 44% of Americans use Facebook as a source of news. Second, Facebook itself conducted a joint study with the University of California–San Diego in 2012 to determine the effectiveness of social ads on real-life voting behavior. Thanks to this and other studies, the data on Russia's Facebook reach gives us a unique window onto the level of behavior change possible at this scale.

It's worth noting that among news producers, Facebook is consistently the most effective social network for engagement – far surpassing Twitter in the number of users who actually click on the content in their feed – with the possible exception of Reddit, which is also much more difficult to manipulate. For that reason, the behavior multiplier of Russia's Facebook influence was likely more significant than its efforts on Twitter, Instagram, or YouTube.



The Facebook-UCSD study was intended to demonstrate the effectiveness of ads that use social signaling to demonstrate behavior change. By including this single piece of content in users' feeds for a period of about 12 hours, Facebook and UCSD were able to increase voter

turnout by .4%. The key, they said, was in the social signaling indicated by the photos of friends that ran at the bottom of the ad. A similar ad without any social signaling of voting behavior had little to no impact on voter turnout. That figure quadrupled, they said, based on organic unpaid exposure to that ad.

Of course, there isn't a one-to-one correlation between Facebook's experiment and

the ads circulated by the IRA. The content of each was different, paid IRA content likely reached those following its pages far more frequently than Facebook's single get-out-the-vote (GOTV) post, and paid IRA ads were focused on consolidating existing identities in order to manipulate behavior, not just convincing users to vote regardless of their political affiliations. For these and other reasons I'll explore shortly, it's likely that the content shared through IRA-associated Facebook groups was much more effective than Facebook's 2012 GOTV research.

Still, we can apply Facebook's findings to the reach of the IRA's ads to establish a general starting point for how much IRA ads might have been able to increase GOP voter turnout.

To do that, we need to start with a baseline assessment of voter turnout. In essence, how many of the 126 million users who saw Russian ads would have turned out to vote, regardless of whether they were impacted by the ads themselves? Mean voter turnout in the elections between 2000 and 2012 was 58.65%. Using that average, we can assume that 73,899,000 of the 126,000,000 users reached would have turned out to vote regardless of whether they were impacted by IRA ads.

If the IRA campaigns were only as effective as Facebook's GOTV efforts, the total turnout among directly targeted users would have jumped to 59.05%, or 74,403,000 voters. That's an additional 504,000 voters. If we add organic reach based on social sharing (essentially, how many users would've changed their behavior as a result of seeing their Facebook friends share the IRA's paid content) – which, in Facebook's experiment, boosted voter turnout by a factor of 4.667 – that number jumps to 2,352,168 voters.

According to special counselor Mueller's indictment, Russia's influence efforts were focused on swing states, so we can assume that some majority of those 2,352,168 additional votes would have been centered in swing states such as Michigan, Wisconsin, and Pennsylvania.

A note on Facebook as a trustworthy signal of Russian influence.

One of the fallacies so far employed in public analysis of Russian influence has been the assumption that Facebook's publicly reported reach numbers are the primary signal of Russian impact. This is problematic for several reasons:

1. The real impact of Russian influence on public opinion during the election expanded far beyond Facebook to include Google, Twitter, YouTube, the news media, Wikileaks, and many others.

2. Facebook has powerful business incentives to downplay the reach of Russian propaganda, including, but not limited to:

- Maximizing shareholder value, which is directly tied to the number of legitimate Active Monthly Users on the network
- Maintaining the social value of its platform to avoid hemorrhaging users
- Avoiding regulation by US and EU lawmakers
- Avoiding conflict with China, an ally of Russia and one of the largest markets as-yet untapped by Facebook
- Retaining internal US engineering talent

3. Facebook has repeatedly made moves to downplay its role in affecting voters and to obscure public access to data that could help illuminate the full reach and impact of Russian influence through its platform, as evidenced by the timeline below:

- **Sept. 2012:** Facebook-UCSD study concludes that "even small effects [of social ads on behavior change] could yield behavior changes for millions of people."
- **June 2016:** Facebook security <u>identifies that</u> Russian intelligence group APT28 is creating accounts, including Guccifer 2.0 & DCLeaks, to share leaked emails during presidential race. Execs reportedly contact the FBI about their findings.
- Nov. 12, 2016: Facebook CEO Mark Zuckerberg calls idea that fake news on Facebook could have influenced the election "crazy" while onstage at Techonomy.
- Nov. 21, 2016: Barack Obama <u>pulls Zuckerberg aside</u> at gathering of world leaders in Lima, Peru, to warn him about seriousness of fake news and political misinformation. Zuckerberg reportedly dismisses his concerns, saying fake news isn't widespread on Facebook and the problem wouldn't be easy to fix.
- **April 12, 2017:** Facebook <u>announces</u> removal of "more than 30,000" fake accounts ahead of the French election.
- **Sept. 5, 2017:** Facebook tells congressional investigators that the Internet Research Agency spent \$100,000 on 3,000 Facebook ads between June 2015 and May 2017.
- **Sept. 21, 2017:** In response to public criticism, Facebook general counsel Colin Stretch <u>announces</u> the company will share ad content with congressional investigators.

Strategic News Service[™] LLC

- **Oct. 2, 2017:** Facebook announces that paid IRA ads reached 10 million users, 44% before the election.
- Oct. 5, 2017: <u>Data analysis</u> of five IRA-associated Facebook groups reveals that Facebook's estimate likely undercut the actual reach of IRA ads by at least several times. The data and analysis, collected using social-listening tool CrowdTangle, was published by Jonathan Albright, research director of Columbia's Tow Center for Digital Journalism.
- **Oct. 6, 2017:** Facebook leadership calls Albright to discuss his research, during which he learns that the company has removed all past Facebook posts from CrowdTangle in the 24-hour window since he published, effectively blocking any further independent analysis of Russian influence.
- **Oct. 30, 2017:** Facebook submits written testimony to Congress reporting that 125 million Facebook users were exposed to content from IRA-linked accounts between January 2015 and August 2017.
- Nov. 1, 2017: Facebook testifies before the Senate Intelligence Committee that it has found an additional 120,000 IRA-linked posts on Instagram, revising its testimony to include an additional 25 million Instagram users reached by Russian content.
- Nov. 8, 2017: Jonathan Albright <u>publishes independent analysis</u> of Instagram data, estimating that 28 closed IRA Instagram accounts resulted in 145 million *engagements* with users, including Likes, video views, and comments, between October 2016 and August 2017. Albright's analysis did not take into account the reach attained by users reposting messages from IRA groups, which his research found was widespread across the platform.

It should be noted that Facebook seems to have collaborated closely with the Mueller investigation on its recent indictments. However, given this pattern of obscuring data and repeatedly under-assessing the impact of Russian influence on its platform, it would be naive to expect that Facebook has, even now, given the public a full accounting of Russian influence on its platforms.

Further, it's likely that the company doesn't yet itself understand the full reach of Russian propaganda on Facebook and Instagram. According to the Department of Justice indictment, which detailed the activities of 13 Russian nationals and three Russia-associated entities, including the IRA: "Defendants also procured and used

computer infrastructure, based partly in the United States, to hide the Russian origin of their activities and to avoid detection by US regulators and law enforcement." There is so far no indication from Facebook's public disclosures that it has done a full assessment of the impacts of these actors.

It's also worth considering that other entities may have been using similar tactics on Russia's behalf, including:

- Many independent contractors offer armies of fake profiles to the highest bidder, but wouldn't necessarily be identifiably connected to Russian interests.
- Due to the intensity of public scrutiny around the IRA, the Kremlin reportedly shut down the agency in 2017 and soon thereafter reopened it under a different name. Facebook hasn't made any disclosures about the name of this new entity or whether it has continued to purchase ads on Facebook's platform.

In this case, Russia's ads were likely much more effective than Facebook's 2012 study revealed. Here's why:

• **Persuasion vs. mobilization.** The calculations above demonstrate how reported IRA ad buys would've affected voter turnout, but don't take into account any effects of persuasion. Russia is expert at creating convincing cultural and political propaganda that has successfully manipulated the political views of entire cultural factions, especially in former Soviet Bloc states.

When I was traveling to Lithuania two years ago, a friend working in government security told me that the Lithuanian government was no longer able to control the effects of Russian propaganda on the worldviews of its own people. Concerned citizens had created anti-disinformation brigades to identify and correct online misinformation. I was incredulous. How could a functioning democracy fail to keep Russian propaganda off of its broadcast networks? At that point, I chalked it up to an ineffective Lithuanian government. I didn't yet understand how pernicious and effective Russian misinformation could be, even in a supposedly secure and self-governed democracy.

In the last 10 years, many other countries – including Poland, Kyrgyzstan, Ukraine, and Estonia – have also struggled to combat the ability of Russian propaganda to shape their national political and cultural narratives. I've now had dozens of conversations with past and present citizens of these and other countries who describe how Russian propaganda has changed the political face of their former homes. Many of them are extremely passionate about the scale of the problem, but even if living in the US, are afraid to go on record about their experiences, given Russia's willingness to punish, or even kill, those who criticize its politics.

- Those with less education are more biased by false information even once they know it's false. *Scientific American* recently published an excellent analysis of the research on fake news, misinformation, and cognitive ability. The nut of it is this: those with low cognitive ability are more likely to believe false information even after they've been explicitly told it's false. Cognitive ability also correlates with education, which teaches meta-cognitive skills the ability to monitor and regulate one's own thinking, which can be used to combat the effects of misinformation on worldview.
- The Trump campaign targeted low cognitive-ability voters.
- Repeated exposure is more convincing than one-rime exposure.
- Fake news is more viral than real news.

Hacking the Mainstream Media.

1. Hack & Release of DNC emails suggests party leadership worked to sabotage the candidacy of Bernie Sanders through DCLeaks and <u>WikiLeaks</u> (with 5.3 million Twitter followers) in June/July of 2016 and resulting media coverage of DNC hack.

The timing of this leak is important. It immediately followed the US primary – a time when Bernie Sanders supporters were feeling most disenfranchised and looking to understand why he had lost. By seizing the moment, Russia was able to capitalize on existing political tensions and to funnel those tensions into anti-Hillary sentiment. It's a strategy that fits well with Russia's broader goals of supporting Bernie and Trump and undermining Hillary.

Further, there was a strong interest among US internet users in the DNC email hack, as evidenced by the following Google Trends report for the period between June 1 and November 8, 2016:

SNS: Russia Flipped the US Elect	ion Week of February 19, 2018	16
• DNC Search term	• Wikileaks Search term	+ Add comparison
United States • 6/17/16 - 11/8/16 •	All categories Veb Search V	
Interest over time 🕜		≛ ↔ <
100 75 50 25		
Average Jun 17, 2016	Aug 6, 2016	Sep 25, 2016

The trend lines in Michigan, Wisconsin, and Pennsylvania mimicked the national trend line shown above for the same time period. That big blue spike in interest in the DNC correlates with the Wikileaks release of the DNC emails. It's also an indication of why Russian hackers chose to partner with the organization, which had significantly more trust among Americans than the DCLeaks Facebook group created by Russia, which Facebook first identified in 2014. Indeed, when DCLeaks first released the DNC emails in June, they had little impact on public interest. There is no spike in online search results that correlates with their original release. It wasn't until Wikileaks and the media stepped in to publicize them that the spike in public interest took off.

G. Elliott Morris ⋈ ≗ @gelliottmorris	9
Sanders -> Trump voters WI: 51k MI: 47k PA: 116k	
Trump win margin WI: 22k MI: 10k PA: 44k	
$(𝒴)_{ twitter.com/b_schaffner/st}$ 5:16 PM - Aug 22, 2017 ♡ 3,554 $♀$ 3,079 people are talking about this	θ

Nationally, 1 in 12 Sanders supporters voted for Trump. <u>According to Brian</u> <u>Schaffner</u> of the Cooperative Congressional Election Study, that number was 9% in Wisconsin, 8% in Michigan, and 16% in Pennsylvania – enough to have flipped the vote in those three states.

That rate of defection isn't unusual – 10% of Clinton supporters went for candidate John McCain in 2004 – but the demographics of the voters who flipped are worth noting: as Vox <u>reported back in August</u>, "Bernie-Trump voters were older and whiter than the average Democratic primary voter, for instance.... the Bernie-Trump voter also proved much more likely to consider himself or herself 'somewhat conservative' or 'very conservative' than the average Democrat." In other words, Trump's base.

What was unusual was the 8% of Sanders supporters who voted third-party or write-in candidates, bringing the total Bernie voters who didn't vote Clinton up to a full 20%. In the last comparative election, 2008, independent candidates <u>took 1.4%</u> of the total popular vote; in 2004, they took just over 1%. In 2016, they took approximately 6%.

That mimics Russia's intended outcomes for the race: suppress the Hillary vote and convince her potential voters to abstain or vote third-party on moral grounds. Collectively, this is a signal of the effectiveness of Russia's efforts that requires more investigation.

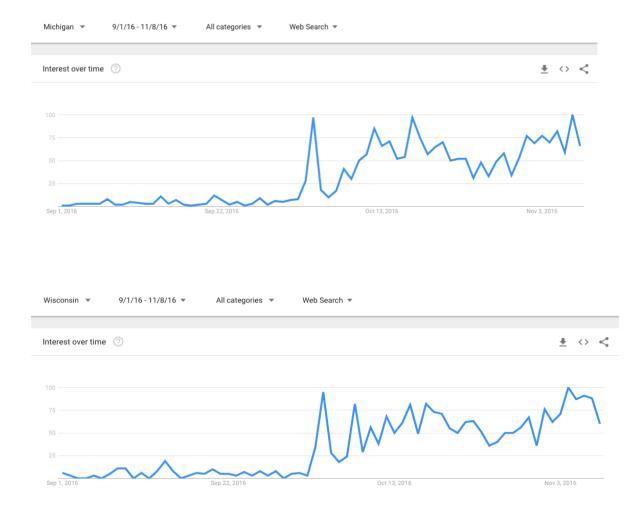
2. Hack & Release of John Podesta's emails through Wikileaks in October 2016, indicating (among other things) that Hillary had received a CNN debate question in advance from Donna Brazile, and resulting media coverage.

Like the DNC hack, the release of John Podesta's emails was strategically timed: Trump's "Billy Bush" tape, in which he was seen bragging about sexually assaulting women, had just been released and was generating significant media attention; Trump University was fighting charges of defrauding its students in federal court – charges Trump settled for \$25 million shortly after winning; and Clinton had a seven-point lead in the polls.

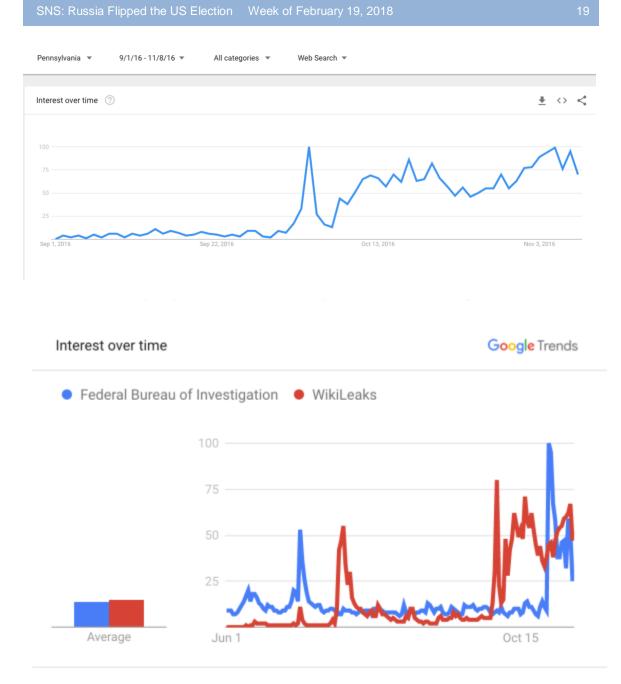
Then, in early October, Wikileaks began its slow drip of John Podesta's emails. The content of the emails themselves wasn't particularly surprising or provocative – mostly a range of political maneuvering and blunt conversations about Hillary herself – but it dominated the news cycle for weeks. Moreover, the more damaging revelations – for example, that Donna Brazile had given Clinton early access to a debate question, or that an independent entity was raising funds for Bill Clinton's personal expenses – fed into the "Crooked Hillary" greedy political insider image that Russia had been pushing for months, and was most certainly damaging to her campaign in the last month leading up to the election.

Moreover, as FiveThirtyEight reported in December of 2016, Trump "won among voters who decided to vote for [him] in October 51 percent to 37 percent, according to <u>national exit polls</u>. That's Trump's best time period. He carried voters who decided in the final week, when you might expect [former FBI director James] Comey's letter to have had the largest impact, 45 percent to 42 percent. (Although, Trump's margin among those who decided in the final week was wider in the exit polls in <u>some crucial swing states.</u>)"

Further, we can see that in Michigan, Wisconsin, and Pennsylvania – the key states, for our purposes here – there was significant interest in the Wikileaks Podesta emails between October 1 and Election Day ... almost as much as in Comey's letter.



Interest in Wikileaks Among Internet Users in Michigan, Wisconsin, and Pennsylvania:



United States. 6/1/16 - 11/8/16.

According to exit polls, 13% of voters waited until the final week of the election to make up their minds. If we apply that percentage to the number of total voters in Michigan, Wisconsin, and Pennsylvania, we find that 623,907 voters in Michigan, 386,900 voters in Wisconsin, and 801,512 voters in Pennsylvania made up their minds in the last week before the election.

Of those, Trump carried 50% in Michigan, 59% in Wisconsin, and 54% in Pennsylvania – or approximately 318,193 Michigan voters, 197,319 voters in Wisconsin, and 408,771 voters in Pennsylvania.

The impact of these leaks and the media coverage that followed would have been more than sufficient to flip the outcome of those three states and their 75 combined electoral votes.

3. The *Washington Post*, CBS, the *Miami Herald*, Vox Media, and other wellknown media outlets further amplified these accounts by sharing tweets from Russian accounts as the legitimate "grassroots" opinions of everyday Americans. Collectively, those four sites had 22.9 million visitors in October of 2016.

4. Hacking into electoral databases in 21 states, including Michigan and Wisconsin. There is so far no definitive proof that Russia was successful in removing voters from the rolls in swing states, although reports of voters who didn't receive their ballots or were removed from voter rolls, and reports of malfunctioning machines, were widespread on Election Day 2016, including in swing states. **This is an avenue that requires further investigation.**

"What Happened"

In the end, 20% of Bernie supporters defected either to third-party candidates or to Trump. And Trump, for his part, won overwhelmingly among the 13% of voters who made up their mind in the last week of the election and would've been most likely to have been swayed by the Wikileaks emails: 50% in Michigan, 59% in Wisconsin, and 54% in Pennsylvania, according to <u>exit polls</u>.

Those 318,193 Michiganders, 197,319 Wisconsinites, and 408,771 Pennsylvanians who broke for Trump in the last week of the election left Clinton's supporters standing, defeated, under the unbroken glass ceiling of the Javits Center on election night 2016 – just 38,875 votes short of the White House.

Clinton, too stunned by her own defeat to make an appearance, went home that night without addressing her supporters. Her winning popular margin of 2.9 million votes was worthless, except as a bitter salve to reduce the humiliation of her coming book, *What Happened*.

While Russia may not have affected the voting behavior of the tens or hundreds of millions of US voters targeted by its sophisticated multimedia information warfare efforts, the massive volume of Americans reached by Russia's influence efforts and Facebook's demonstrated ability to manipulate the behavior of its users through even small changes to the content and tone of its Newsfeed means that Russian interference was more than sufficient to change the votes of the 38,875 voters in Michigan, Wisconsin, and Pennsylvania who flipped the election in Donald Trump's favor.

About Berit Anderson



Berit Anderson is the CEO and editor-in-chief of Scout.ai, which explores the near-term implications of technology by combining analysis and near-term science fiction. Her investigative reporting on information warfare in the 2016 US presidential election provided the first blueprint for how the Trump campaign and Russia used technology to undermine the democratic process in the US and, in Russia's case, across Europe. In 2017, she traveled to the Brussels Forum to debate the former prime minister of Sweden about whether the internet is a force for democracy.

Before founding Scout.ai, Berit was the managing editor at Crosscut.com, a civic news site in Seattle, where she reinvented community journalism to help solve local problems and staged scenario-planning games to help the city plan for cyber-attacks and deal with climate refugees. She has worked closely with SNS, as well as the SNS FiRe conference, which brings together C-level technology executives, world-class scientists, and Oscar-winning documentary filmmakers to discuss how science and technology are reshaping our world.

Copyright © 2018 Strategic News Service and Berit Anderson. Redistribution prohibited without written permission.

I would like to thank Berit Anderson for her continuing great work on this critically important issue, and for taking a very large part of the last few weeks to compile this research and write this issue. I would also like to thank Brett Horvath for his extensive notations and suggestions, all of them smart and many of them incorporated into the final version of this piece. And, last and never least, our gratitude to Editor-in-Chief Sally Anderson, who caught the ball running and sent it back in record time and with predictably high quality.

Your comments are always welcome.

Sincerely,

Mark R. Anderson

CEO

Strategic News Service LLCTel.: 360-378-3431P.O. Box 1969Fax: 360-378-7041Friday Harbor, WA 98250 USAEmail: mark@stratnews.com

CLICK HERE TO SHARE THIS SNS ISSUE

To arrange for a speech or consultation by Mark Anderson on subjects in technology and economics, or to schedule *a strategic review* of your company, email <u>mark@stratnews.com</u>.

We also welcome your thoughts about topics you would like to suggest for future coverage in the SNS Global Report.

For inquiries about **Partnership or Sponsorship Opportunities** and/or SNS Events, please contact Sharon Anderson Morris, SNS Programs Director, at <u>sam@stratnews.com</u> or 435-649-3645.

QUOTES OF THE WEEK

"In a move that threatens to ratchet up the already tense trade negotiations between Washington and Beijing, a US court has convicted a Chinese company guilty for stealing proprietary technology from a US firm." – *Russian anti-US propaganda on sputniknews.com.*

How you know it's propaganda: using proof of China's illegal trade practices as evidence of a US-launched trade war.

"We want to build a network so the Chinese can't listen to your calls. We have to have a secure network that doesn't allow bad actors to get in. We also have to ensure the Chinese don't take over the market and put every non-5G network out of business." – Senior US official, quoted by Reuters.

"The ice caps were going to melt, they were going to be gone by now. But now they're setting records. They're at a record level." – *Donald Trump, to Reuters, quoted on msn.com.*

"This is the biggest case in the history of Uber." – William Carmody, a lawyer for Uber, during a pretrial hearing last week; quoted on Wpxi.com.

Uber wisely settled with Google before the jury got to hammering them.

"I would guess but many many systems are being compromised whether it's drones whether it's aircraft whether it's naval equipment whether it's submarines you know go on and on and on because it's all vulnerable. And even our defense contractors know that many worry about but it's very difficult to protect using commercial hardware and there's no other hardware. You can't go out and buy a secure computer today because there isn't any. And certainly none that's really protected by the U.S. Government. So, we need to have that whole change in how we go about this if we're going to have protection in the future. I think you know we need the equivalent of a Manhattan project you know for computers like we did for the atomic bomb.

"In a report published in 2017, the commission on the theft of American intellectual property named China as the main offender. In fact, 87 percent of counterfeit goods coming into the u-s are Chinese. That same report estimates the annual cost to the u-s economy could be as high as six hundred billion dollars per year in counterfeit goods, pirated software and theft of trade secrets. It also estimates that at this rate the u-s has suffered roughly one-point-two trillion dollars in economic damage." – *Stephen Bryen, author of the new book* Technology Security and National Power: Winners and Losers (*Transaction Publishers*), past senior staff director of the US Senate Foreign Relations Committee, and past Deputy Under Secretary of Defense for Trade Security Policy, from a "Full Measure" TV interview; on bryensblog.com.

"More foreign companies in China are realizing the deck is stacked against them. And a trade conflict with the US is brewing. But Boeing, America's premier aerospace company, is undeterred. It is setting up a 'finishing plant' for 737's near Shanghai this year.... Jumping into the PRC is, of course, risky – given the Chinese track record for stealing or strong-arming technology, lack of an honest legal system and discrimination against foreign companies – especially successful ones. But it's even riskier for Boeing. The PRC sorely wants into the commercial airliner market....

"In the China market, things have a way of turning out differently than one expects. Ask Motorola, Microsoft, Google, and Apple. Boeing should ask itself (repeatedly) why its experience will be different." – *In the* Asia Times.

TAKEOUT WINDOW

The New Post-Russia Zuckerberg Look

(From the latest cover of *WIRED*)



New Graphene Markets

Mark,

I have no idea what Callaway is actually doing, but this is the first Graphene reference I've ever seen in a mass-market product.

- From SNS member John Rydell

John, while graphene is now appearing in tennis rackets, bicycles, cars, and other highend mass markets, we want to celebrate every step forward. FORE ---



UPGRADES

Elon Lifts More Than Starman and His Tesla Roadster

The most impressive technical event of the year – or perhaps the decade – occurred earlier this month, and no, it wasn't China cloning primates the same way the UK cloned sheep years ago.

SNS member Elon Musk's SpaceX performed the most amazing feat in rocketry history, with the flawless launch of the Falcon Heavy and the safe return of its boosters to Earth.

In an era that seems to be dominated by greed, willful ignorance about science, "party before country" government, and addiction to Facebook and Snapchat, most SNSers took a "productivity lapse" from work to watch the most inspiring rocket performance in history.

Getting this done, on a first launch, required a team of mixed-age professionals who understand deep science, commitment, perseverance, performance measurement, and brutal intellectual honesty.

Watching the launch, I couldn't help but feel that the excitement and passion evident in the sustained shouts of delight from the SpaceX staff said it all: *This* is the America we dream of, and believe in. Thank you, Elon, for doing the right and smart things, consistently and with flair. You have provided our youth with something beautiful to admire and strive to become, and there is no greater gift you could have given to the country or the world.

Elon, you're the best. – *mra*.



To see the full video of the launch, go to: https://www.youtube.com/watch?v=sB nEtZxPog

ETHERMAIL

<u>Re: SNS: "Special Alert: The Great China Recession" and</u> <u>"SNS: What is XXVI (Alphabet, Google)?"</u>

Subject: You're the best.

Mark,

[Excerpted from SNS]

"If this is so, it marks a sad day in Google history. The story is here: <<u>https://www.reuters.com/article/us-china-google-tencent/google-announces-</u> patent-agreement-with-tencent-amid-china-push-idUSKBN1F80DF>

Worse for Google employees and shareholders, and inventors everywhere, it suggests a pivot away from its past strong stance for IP protection and against censorship.

(A new report from the UK government this month indicated that the final death toll in the Tiananmen Square massacre was not in the hundreds, as reported by Beijing, but at least 10,000. Oops! Now this newsletter won't be allowed in China.)

How much was paid to Google for its patents? Did Google really license *all* of its IP to China? The details have not been released. Which begs the question:

Why not?

Welcome back to China, Google.

Let's hope Google's managers see the light before the company goes the way of Nortel Networks, Motorola, Siemens Networks, Ericsson, AMSC, or many others, including Cisco - the past home of the person who did this deal."

William Lohse [Founder Social Starts LP and the Pivot Conference NYC, San Francisco, and Tokyo]

[P.S.]

Subject: You've done it again

I'm not connected at the moment, here in this aeroplane, but I'd send you a clip of McGoo congratulating himself if I could. Except you can see!

And you're brave:

10 pts. Zuck himself has reversed his story on FB's fake news and Russian influence. What a jerk.

Bill Lohse

[And:]

Subject: Fwd: Team Human Live

Mark,

Rushkoff's 12 steps below sound to me a lot like "focus on flows, not stocks." I am not necessarily championing his formulation or advice, but noting that spotting a "pattern" of "flows and interactions" may require translating other terms for essentially the same items.

I might also suggest that I was a bit surprised that your discussion of flows and interactions did not also include patterns, given the attention you have paid to pattern-recognition chips over the years. In this case, I am using pattern not as a prescription for a design to be followed, but as an observed regularity in the occurrence of flows and interactions. Body temperature "flows" in the sense of being different at different times of the day; it forms a "pattern" if those differences repeat on a reasonably regular basis.

In any case, your comments always get my highest accolade – they make me think, often from a new perspective.

Thank you.

----- Forwarded message ------

Twelve Steps to Sustainable Business

Nobody cares about how we got here. They just want solutions for how to get out of the trap. CEOs are struggling to create value for corporations programmed only to accumulate more capital, drain local economies, and externalize the costs.

So I've been ending my talks with specific, actionable suggestions for how companies of all sizes and stages can become more sustainably profitable in the current environment. It amounts to a 12-step program for getting off the addiction to growth. If you need to grow in order to survive, then you're not a real business - you're just a brand name on debt. --- 1. In all decisions, optimize for the velocity of money over the accumulation of capital. How do we keep money moving instead of piling up? If you are sitting on money that can't be deployed, you are taking too much out of the system.

2. Make them rich. Make your customers, suppliers, partners, and even your competitors rich. If you drain the value from your marketplace, your customers won't have money to spend with you. If you squeeze your suppliers on margins, they will be looking to do business with anyone else at the first opportunity. If you make everyone who comes into contact with you wealthy, they will want to keep working with you.

3. Employ bounded investment strategies. Think of the US Steelworkers, who invested their retirement money in construction projects that also put steelworkers to work. Or their subsequent decision to invest in projects that hired them to build nursing homes for their own parents. This triple and quadruple dipping is not a conflict of interests, but the leverage that comes with bounded investing. With boundaries, you can generate the cyclone effect required to enhance the velocity of money. Don€[™]t earn ten dollars once; earn one dollar ten times.

4. Push for a tax policy that promotes revenues instead capital gains. Shareholders are addicted to growth of share price because dividends are taxed higher. Reverse the tax code to promote flow over growth. Dividends and payroll should be tax incentivized; passive capital gains, discouraged.

5. Organize as Platform Cooperatives. Think Uber, where the drivers own the company. Even if they€™re getting replaced by autonomous vehicles, they are going to own the company for which their labor served as the R&D and machine learning. Labor must participate in ownership of the means of production, instead of simply getting a redistribution of spoils after the fact through taxes. Coops like Winco beat shareholder companies like Walmart wherever they compete.

6. Local crowdfunding. If you run a bank or credit union, instead of giving 100k loan to a small business, give 50k contingent on their ability to raise the other 50k from the community, through advance-sale discount coupons. Customers pay \$100 for \$120 of pizza at the restaurant when it finishes expansion. Locals invest in their community and Main St, instead of outsourcing investment to the S&P, and draining local coffers.

7. Develop favor banks and local currencies. An economy is people with needs and people with skills. They shouldn't be hampered for lack of a means of exchange. Local currencies and favor banks allow for the exchange of value without borrowing at interest from a central treasury. This also means local businesses in the chain can transcend the artificial growth requirement.

8. Cooperative businesses cooperate. Do everything open source, open API, and without "trade secrets." Maintaining secrets shows you believe your company's best innovations are in the past. Sharing secrets means you know your best innovations lie ahead, and that you benefit from everyone being smarter. It

positions you as the center of competence in your field, dedicated to promoting a culture of learning and innovation.

9. Larger companies can enact economic experiments as local, limited trials. No need to turn the whole ship. Sell the ideas to the CEO or Board as public relations stunts, then use their success to promote them throughout company. Walmart can introduce an aisle of locally produced goods; supermarkets can open parking lot to farmers market on Sundays; banks can offer local crowdfunding apps. Promote disruptive ideas as if they are just one-offs, not the radical game-changing innovations they really are.

10. Run your company like a family business. Family businesses do better in every metric than shareholder owned businesses. They make more money in the long run, have better-paid employees, more stability, less damage externalized to the community or environment, and so on. They are concerned with legacy, the family name, the relationship of their own families to communities in which they live, and the company itself as the inheritance they are bequeathing subsequent generations.

11. Develop new metrics for success other than growth. Put them down on paper. How prosperous is the community in which we are operating? How many unsolicited resumes from qualified candidates are coming in? How well are our suppliers doing? Do our frontline employees feel they are being supported by the company?

12. Your goods and services are your product - not your stock. Don't build a company to sell it to someone else; build it to run it, yourself. Companies are not disposable. An "exit strategy" is for Ponzi schemes. The world is connected. The environment is limited. The economy is circular. There is nowhere to run.

Douglas Rushkoff

<u>http://rushkoff.com</u>
Founder, Laboratory for Digital Humanism
Professor of Media Theory and Digital Economics, CUNY/Queens
Fellow, Institute for the Future

This is RushkoffList, a monthlyish update and advance look at work in progress. Feel free to forward to your friends as long as you include this footer. To subscribe, use this link: <u>http://www.simplelists.com/subscribe/rushkoff</u>

Bill Lohse

Mark,

Re the Huawei Matebook; to avoid upsetting OEMs too much when it went into the hardware market, Microsoft offered to make some of its hardware (case) designs and information available to OEMs who want it. When you see a 2-in-1 that looks very, very

much like a Surface, it's likely that it's licensed in this way (hence all that co-marketing on the stadium). Challenge for you: get someone at Microsoft to tell you the terms for that design sharing

Can't wait to hear your take on the US tax plan driving Dell back to being a public company by joining up with VMware, now that the cost of all the debt is unsustainable under the new rules...

Mary Branscombe Technology Journalism & Consultancy London www.marybranscombe.com

Subject: Fwd: Cryptocurrency Christmas correction?

Mark,

One of your predictions already in the bag!

Merry Christmas!

Steve Waite [Author, Venture Investing in Science and Co-Founder Graphene Stakeholders Assoc. Shelton, CT]

Subject: "SNS Special Alert: The Great China Recession"

Mark,

To: [Name withheld]

Here is the latest post from the Friday Harbor "guru" that I find always makes me think. I do want to discuss the implications of this, especially vis-a-vis my [investment target] question, and you may want to consider subscribing to Mark's newsletter.

Subscribers to the newsletter can forward one issue per person, so long as we copy the author, so I have copied him as you can see.

Mark:

[Name withheld] is at UBS ... and the broker for my family, as well as many others you will have heard of. (I do not know whether he can disclose names; that is up to him.)

Rollie Cole [Co-Founder, Wholesale Economic Development; and Author, *Wholesale Economic Development Vol. I* http://preview.tinyurl.com/wholesaleeconomics Austin, TX]

Subject: Re: "SNS Special Alert: The Great China Recession"

Mark,

Fabulous work! You and Evan are national assets. Thank you.

Jody Westby [CEO Global Cyber Risk LLC Washington, DC]

Subject: Re: "SNS Special Alert: The Great China Recession"

Mark,

"The emperor, it turns out, is Chinese, and he has no clothes."

Lol!!! I love it!

Steve Waite [Author, Venture Investing in Science and Co-Founder Graphene Stakeholders Assoc. Shelton, CT]

Subject: Interesting

Mark,

<<u>http://getwiser.com/read/o5251/a61891648?se=toc&so=cu&utm_medium=email&utm_</u> source=transactional&utm_campaign=info%40getwiser.com>

Bill Lohse

Subject: Fwd: {Rogin's VIP List} How China forces American companies to do its political bidding

Mark,

A must-read from one of my new friends from the Brussels Forum. Note the hotel chain. This s*** is insane.

----- Forwarded message ------

From: Josh Rogin

<<u>https://www.washingtonpost.com/opinions/global-opinions/how-china-forces-american-companies-to-do-its-political-bidding/2018/01/21/52a1d5a0-fd63-11e7-8f66-2df0b94bb98a_story.html?utm_term=.bfac5ec80dd7></u>

How China forces American companies to do its political bidding

By Josh Rogin Global Opinions January 21

As China's economic might grows, Beijing is leveraging that power to coerce foreign companies to advance its political narrative and punish them when they step out of line. The Chinese Communist Party's treatment this month of hotel giant Marriott after a minor website error takes the effort to a new and dangerous level.

In Washington, the Chinese government's overreaction to Marriott listing Taiwan, Tibet, Hong Kong and Macau as "countries" on <u>an emailed questionnaire</u> has sparked alarm. Trump administration officials, lawmakers and experts said the Communist Party is escalating how far it is willing to go in enforcing strict adherence to its political positions among foreign actors.

After a Marriott Rewards employee "liked" a Jan. 9 <u>tweet</u> by the "Friends of Tibet" group praising the questionnaire, Chinese authorities called in Marriott officials for questioning, shut down their Chinese website and mobile apps, and demanded an apology. The <u>Jan. 11 apology</u> from Marriott CEO Arne Sorenson parroted the language the Communist Party uses to describe groups that stand opposed to Chinese repression or advocate for Tibetan autonomy.

"We don't support anyone who subverts the sovereignty and territorial integrity of China and we do not intend in any way to encourage or incite any such people or groups," Sorenson wrote.

Marriott has <u>more than 300 hotels</u> in China, its second-largest single market, after the United States. While it began disciplinary proceedings against the employee who "liked" the offending tweet, Chinese netizens <u>scoured the</u> <u>Internet</u> and found dozens more foreign corporations that had listed as countries territories that are claimed by China. Chinese <u>Internet bots</u> fueled the purportedly popular outrage. Corporations including Delta Air Lines and Zara <u>rushed out</u> apologies of their own. But the Chinese government didn't stop there. ---

--- Marriott International Asia Pacific President Craig Smith turned down an interview request from me but <u>gave an interview</u> to China Daily, in which he called the incident probably one of the biggest mistakes of his career. In fact, the biggest mistake that American corporations can make is allowing themselves to be used as tools by the Chinese Communist Party to advance illiberal norms.

Washington is awake to the threat of Chinese economic coercion of American companies for political objectives. Now policymakers must persuade corporations to ask themselves if there is a larger interest at stake than their bottom line."

Josh Rogin Columnist - Washington Post Political Analyst - CNN

Berit Anderson CEO and Editor-in-Chief Scout.ai Seattle

Subject: China Special Alert

Mark,

And, I am very proud of you for that!!!

Jan Bolt [Attorney Santa Rosa, CA]

On China and Taiwan

Mark, Evan [Anderson] and Scott [Foster],

Now this is an interesting development. Seems like Trump is playing with China in response to China playing with the US on trade imbalances, economic protectionism, currency manipulation, and IP theft. – JP

Chinese media warns the US of 'retaliations' from 'all sides' after new Taiwan bills passed

The U.S. made a move this week to strengthen its relationship with Taiwan, raising eyebrows in China.

Read more: <<u>https://www.cnbc.com/2018/01/10/new-bills-strengthen-us-</u>taiwan-relations-angering-china.html>

John Petote [Founder, Santa Barbara Angel Alliance and SNS Ambassador for Angel Investing Santa Barbara, CA]

Subject: Re: CNBC - Chinese media warns the US of 'retaliations' from 'all sides' after new Taiwan bills passed

Mark, John and Evan,

Good. Obama and Kerry were way too nice (and naive) to poke China like this.

Scott Foster [Author, Stealth Japan Private Equity Analyst and SNS Ambassador for Asia Research Tokyo]

Mark, Scott and John,

Indeed. I always wondered why we didn't stand up outright for Taiwan, as we did before '72.

Know your allies.

Evan Anderson CEO INVNT/IP <u>www.invntip.com</u> Seattle, WA

Subject: Re: CNBC - Chinese media warns the US of 'retaliations' from 'all sides' after new Taiwan bills passed

Mark, Evan and John,

I think that's the problem - policy wanks in AC/DC thinking about "big-picture" geopolitics. Taiwan is not only a pawn in the East Asian Great Game, it is also:

Astride Japan and South Korea's shipping and air transport routes to SE Asia and the Middle East.

An important trade, investment and cultural partner for Japan and the only former Japanese colony that is fond of Japan.

Vital to the high tech sector as home to TSMC and innumerable other companies - including Hon Hai/Foxconn, which may have its factories in China but has its HQ in Taiwan for a reason.

Democratic to a screaming and yelling, pushing and shoving fault, with a population that does not want to be subject to the Chinese dictatorship.

Sell out Taiwan and you sell out Japan, South Korea, the semiconductor industry and principle, undermine our economy, destroy US credibility in Asia and, when combined with China's probably irreversible occupation of the South China Sea, hand Beijing the key to dominance of Asia. Hey, no wonder so many illiberal American liberals and soft-nosed non-Kissinger policy wanks and academics think it's "inevitable" - i.e., a good idea.

Taiwan is also a key indicator of the preference for dictatorship and disregard for the rights of ordinary citizens at the U.N. This is far worse than biting the American hand that feeds it. It is a betrayal of what the U.N. is supposed to be. For comparison, note that Ukraine was a founding member of the U.N. as part of the USSR and retains its seat as an independent country today.

Scott Foster

Subject: Re: CNBC - Chinese media warns the US of 'retaliations' from 'all sides' after new Taiwan bills passed

Mark, John and Scott,

Agreed, absolutely.

Evan Anderson

Subject: Canadian NanoSat Launches from China

Mark,

<<u>http://asmmag.com/features/feature/16701-canadian-nanosatellite-launches-from-</u> china.html>

A new era in space communications began on Jan. 19, 2018, with the successful launch of an ultra-low-cost telecommunications satellite from Canada-based Kepler Communications. The mission serves as a technology demonstration for Kepler's Kuband telecommunications payload.

The initial Kepler nanosatellite was launched from the Jiuquan Satellite Launch Center (JSLC) in northwestern China, with launch service provided by China Great Wall Industries Corp. and contracted through Innovative Space Logistics. This marks the 100th successful launch from JSLC to date. Kepler is the first Canadian spacecraft ever launched from China.

Patrick Hogan [Project Director NASA World Wind NASA Ames Research Center <u>https://worldwind.arc.nasa.gov/</u> Moffett Field, CA]

On Japanese Whaling

Mark, Russ [Daggatt] and Evan [Anderson],

It looks like they've been taking lessons from Wall Street - as in "What part of F-U do you not understand?"

A new old Japanese attitude for a new year and a new world.

Japan Plans New Whaling Mother Ship

Japan is planning to replace the aging mother ship of its whaling fleet, sparking a fiery response --

Scott Foster

Mark, Evan and Scott:

What are the big economic pressure points here? Who is behind this? Who buys and sells the whale meat? Who is financing the ship? Any big Japanese trading companies or banks involved in any way? Who can we hurt to bring pressure?

Russ Daggatt [Founding General Partner Denny Hill Capital Seattle, WA]

Mark, Russ and Evan,

Overall, whaling is a waste of money. So unless Trump and Mattis are willing to slap down their most important ally in Asia or American consumers to forego their Toyotas and Nissans to save the whales, there might not be any economic pressure points.

As far as I know, whaling is financed by the Japanese government. The previous left-wing administration (before Abe) even redirected funds from tsunami and Fukushima relief to whaling. It's a local, jobs for the boys issue, and a yakuza issue (more jobs for boys who might otherwise be on the street), combined with a hey, screw you, we are a sovereign nation issue.

All older Japanese ate whale meat in school cafeterias after the war when food was scarce. They regard it as a part of Japanese culture, but aside from a few traditional whaling villages, it was a policy recommended by the Americans. And, of course, Perry forced Japan open at gunpoint so American whalers in the North Pacific could take on water and supplies in Japan. This history no doubt remains in the back of the Japanese mind.

It seems odd that stubborn Japanese would insist on losing money in order to damage their own reputation, but there you have it. Japan and Australia are putting together a military partnership right now, the South China Sea taking priority over the Southern Ocean.

There are attractively packaged whale meat products - canned and vacuum packed - in the shops on the artificial island in the middle of Tokyo Bay. Overpriced and not flying off the shelves, but there.

Scott Foster

<u>Subject: CNBC - SpaceX's inaugural Falcon Heavy launch succeeds, putting CEO Elon</u> <u>Musk at the front of the rocket race</u>

Mark,

Great news!

Go, Elon, Go...

SpaceX's inaugural Falcon Heavy launch succeeds, putting CEO Elon Musk at the front of the rocket race

Elon Musk took one giant leap to the front of the space industry on Tuesday.

Read more: <u>https://www.cnbc.com/2018/02/06/spacex-falcon-heavy-launch-success.html</u>

John Petote

INSIDE SNS

Please visit <u>www.stratnews.com/insideSNS</u> for:

- Photo galleries of FiRe and other SNS events
- FiRe videos
- SNS iNews®
- The SNS blog, "A Bright Fire"
- The SNS Media page
- SNS FiReFilms
- Subscription rates and permissions
- About SNS and About the Publisher

UPCOMING SNS EVENTS



Register now for FiRe 2018

The 16th annual Future in Review conference October 9-12



Credit: Kris Krug (L) and David Morris

Returning to the beautiful Stein Eriksen Lodge Deer Valley Park City, Utah

www.futureinreview.com/register

WITH GREAT APPRECIATION TO:

Our Global Platinum and FiReFilms Partner:



Global Platinum Partner:

Deloitte.

Global Gold and FiReFilms Partner:

ZIONS BANK[®]

Global Silver Partner:



High performance. Delivered.

and Focus Channel Partners:









... for their Partnership and Support of SNS events.

ADDITIONAL SUPPORTING ORGANIZATIONS



FiReFellows Sponsor:

ZIONS BANK

and FiRe Academic Partner:



Where's Mark?

• On March 13, Mark will be giving a Google Talk at Google HQ on the universal drivers of Flow and Interaction. • On May 7, he will be the dinner speaker at the annual Info-Tech Research Group meeting in Toronto, and on May 8 will be the conference keynote speaker at the same event. • Prior to this, he'll be speaking at the annual SNS Predictions : West Silicon Valley event.

In between times, he'll be trying to avoid the metamorphosis of a dual-cab Toyota pickup into a very large hockey puck on the downhill slopes of island roads. So much for thoughts of spring ---

Copyright © 2018, Strategic News Service LLC

"Strategic News Service," "SNS," "Future in Review," "FiRe," "INVNT/IP," and "SNS Project Inkwell" are all registered service marks of Strategic News Service LLC.

ISSN 1093-8494