From Fake News to Online Attention Hyper–Synchronization

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Eco, Umberto. 1964.
Apocalittici e Integrati.
Milano: Bompiani.

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Bloomingon: Indiana University Press.

Apocalypse Postponed (Umberto Eco)

Venturini, Tommaso. 2010. "Diving in Magma: How to Explore Controversies with Actor-Network Theory." *Public Understanding of Science* 19 (3)

Venturini, Tommaso. 2012. "Building on Faults: How to Represent Controversies with Digital Methods." *Public Understanding of Science* 21 (7)

Venturini, Tommaso, Donato Ricci, Michele Mauri, Lucy Kimbell, and Axel Meunier. 2015. "Designing Controversies and Their Publics." *Design Issues* 31 (3)

http://controverses.sciences-po.fr/archiveindex/

Controversy Mapping (Bruno Latour)

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publicdatalab.org

fakenews.publicdatalab.org

Public Data Lab and the "Fake News crisis"

Slide 1: The "Fake News crisis"

BuzzFeed NEWS

This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook

A BuzzFeed News analysis found that top fake election news stories generated more total engagement on Facebook than top election stories from 19 major news outlets combined.

Total Facebook Engagements for Top 20 Election Stories

The "Fake News crisis"

Slide 2: 4 reasons to stay clear of "fake news"

according to the literature, the notion of fake news is

1. Vague

2. Undistinguishable from past forms of misinformation

3. Charged with a simplistic idea of journalistic truth

4. Politically dangerous

4 reasons to stay clear of "fake news"

Slide 3: 1. Vague

TABLE 1
A typology of fake news definitions

Level of facticity	Author's immediate intention to deceive	
	High	Low
High	Native advertising Propaganda Manipulation	News satire
Low	Fabrication	News parody

Tandoc, E.C., Lim, Z.W. & Ling, R. (2017)
Defining 'Fake News'.
Digital Journalism. 811

Wardle, Claire
Fake news. It's complicated (2017).
First Draft
medium.com/1st-draft/fake-news-its-complicated-d0f773766c79

1. Vague

Slide 4: 2. Undistinguishable from past misinformation

The World

MAINE EXPLOSION CAUSED BY BOMB OR TORPEDO?

2. Undistinguishable from past misinformation

Slide 1

Tuchman, G. (1978). Making News: A Study in the Construction of Reality. New York: The Free Press.

Schudson, M. (1989). The sociology of news production. *Media, Culture & Society*. 11 (3). pp. 263–282

Making News
A Study in the Construction of Reality
GAYE TUCHMAN

Social scientists who study the news speak a language that journalists mistrust and misunderstand. They speak of 'constructing the news', of 'making news', of the 'social construction of reality'. 'News is what newspapermen make it' (Gieber, 1964: 173). 'News is the result of the methods newsworkers employ' (Fishman, 1980: 14). News is 'manufactured by journalists' (Cohen and Young, 1973: 97). Even journalists who are critical of the daily practices of their colleagues and their own organizations find this talk offensive. I have been at several conferences of journalists and social scientists where such language promptly pushed the journalists into a fierce defence of their work, on the familiar ground that they just report the world as they see it, the facts, facts, and nothing but the facts, and yes, there's occasional bias, occasional sensationalism, occasional inaccuracy, but a responsible journalist never, never, never fakes the news.

That's not what we said, the hurt scholars respond. We didn't say journalists *fake* the news, we said journalists *make* the news:

To say that a news report is a story, no more, but no less, is not to demean the news, not to accuse it of being fictitious. Rather, it alerts us that news, like all public documents, is a constructed reality possessing its own internal validity. (Tuchman, 1976: 97)

3. Charged with a simplistic idea of journalistic truth

Slide 2

Claire, W. & Derakhshan, H. (2017). Information Disorder: Toward an interdisciplinary framework for research and policymaking (Report to the Council of Europe).

The term "fake news" has also begun to be appropriated by politicians around the world to describe news organisations whose coverage they find disagreeable. In this way, it's becoming a mechanism by which the powerful can clamp down upon, restrict, undermine and circumvent the free press. It's also worth noting that the term and its visual derivatives (e.g., the red 'FAKE' stamp) have been even more widely appropriated by websites, organisations and political figures identified as untrustworthy by fact-checkers to undermine opposing reporting and news organizations" (p.16)

4. Politically dangerous

Slide 3

http://www.trumptwitterarchive.com/archive/fake%20news/ttff

4. Politically dangerous

Slide 4

I can't help but laugh at the irony of folks screaming up and down about fake news and pointing to the story about how the Pope backs Trump. The areason so many progressives know this story is because it was spread wildly among liberal circles who were citing it as appalling and fake. From what I can gather, it seems as though liberals were far more likely to spread this story than conservatives.

What more could you want if you ran a fake news site whose goal was to make money by getting people to spread misinformation? Getting doubters to click on clickbait is far more profitable than getting believers because they're far more likely to spread the content in an effort to dispel the content. Win!

Boyd, Danah. 2017. "Did Media Literacy Backfire?" *Points*. https://points.datasociety.net/did-media-literacy-backfire-7418c084d88d

"Fake news" is not about fakeness

Slide 1:

"When looking at just the titles of ==fake and real news articles, I find an even stronger dissimilarity between the two, with high consistency between the data sets and high statistical significance== in the differences. Precisely, I find that fake news titles are longer than real news titles and contain simpler words in both length and technicality. Fake titles also used more all capitalized words, significantly more proper nouns, but fewer nouns overall, and fewer stop-words…

==When adding in satire articles to the analysis, I find that the majority of our features distributions are common between satire and fake==. Specifically, both satire and fake use smaller, fewer technical, and fewer analytic words, as well as, fewer quotes, fewer punctuation, more adverbs, and fewer nouns than real articles. Further, fake and satire use significantly more lexical redundancy

Horne, Benjamin D., and Sibel Adali. 2017.
"This Just In: Fake News Packs a Lot in Title, Uses Simpler, Repetitive Content in Text Body, More Similar to Satire than Real News."

"Fake news" is not about fakeness

Slide 2:

?

What is "fake news" about if it is not about fakeness?

Slide 3:
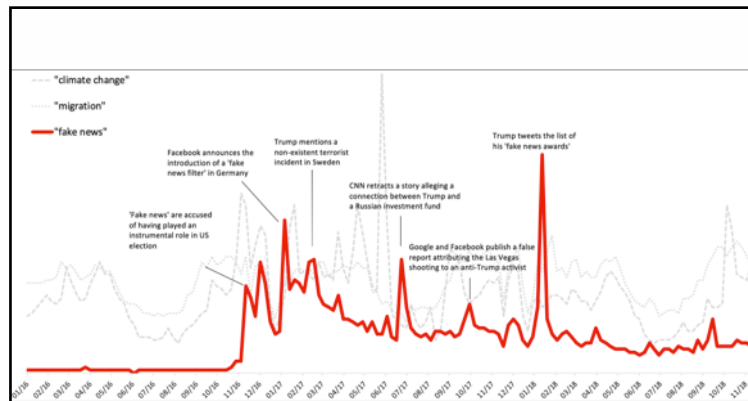
"Fake News" in Google Trends

Slide 4:
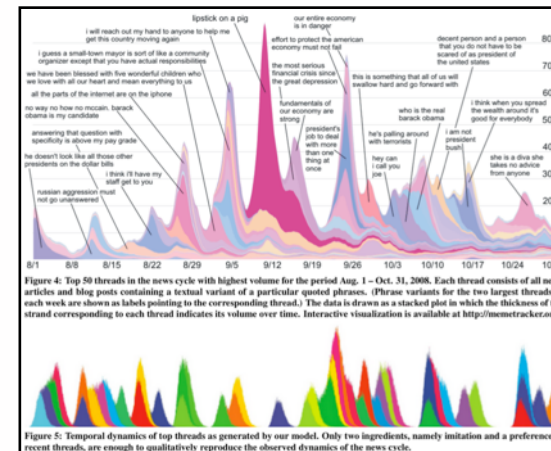
Leskovec, Jure, Lars Backstrom, and Jon Kleinberg. 2009.

"Meme-Tracking and the Dynamics of the News Cycle."

In *Proceedings of the 15th Conference on Knowledge Discovery and Data Mining*, 497–506.

Paris, France.

Meme-tracking project

Slide 1

Up and down with ecology— the "issue-attention cycle"

ANTHONY DOWNS

AMERICAN public attention rarely remains sharply focused upon any one domestic issue for very long—even if it involves a continuing problem of crucial importance to society. Instead, a systematic "issue-attention cycle" seems strongly to influence public attitudes and behavior concerning most key domestic problems. Each of these problems suddenly leaps into prominence, remains there for a short time, and then—though still largely unresolved—gradually fades from the center of public attention.

A problem must be dramatic and exciting to maintain public interest because news is "consumed" by much of the American public (and by publics everywhere) largely as a form of entertainment. As such, it competes with other types of entertainment for a share of each person's time. Every day, there is a fierce struggle for space in the highly limited universe of newsprint and television viewing time.

The Rise and Fall of Social Problems: A Public Arenas Model[1]

3. The construction of social problems occurs within the public arenas. The success (or size, or scope) of a social problem is measured by the amount of attention devoted to it in these arenas.

Carrying Capacity

4. Each arena has a *carrying capacity* that limits the number of social problems it can entertain during a given period.
5. The population of potential social problems (i.e., putative situations or conditions that could be considered problems) is huge.
6. The carrying capacity of the public arenas is much too small to accommodate all potential social problems.
7. Therefore, social problems must compete for space in the public arenas. This competition is ongoing; problems must compete both to enter and to remain on the public agenda.
8. The number of social problems is a function not of the number of harmful or dangerous conditions facing society but of the carrying capacity of public arenas.

11. The amount of attention received by a given social problem varies dynamically over time:
    a) problems that have achieved some success are constantly in danger of undergoing a decline and being displaced; and
    b) while some problems may rise, decline, and reemerge, very few maintain a high level of attention over many years.
12. Except to the extent that the carrying capacities of the public arenas are changing, the ascent of one social problem will tend to be accompanied by the decline of one or more others.

Downs, A. 1972. "Up and down with Ecology: The 'Issue-Attention Cycle.'" *Public Interest* 28

Hilgartner, S. & Bosk, C. 1988. "The Rise and Fall of Social Problems: A Public Arenas Model." *American Journal of Sociology* 94 (1)

Slide 2

What we are considering here, however, are the psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes. For the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs.

The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human functions, creating totally new kinds of cities and new kinds of work and leisure.

McLuhan, Marshall. 1964. Understanding Media: The Extensions of Man. New York: McGraw-Hill.

"It isn't that I don't like current events. There have just been so many of them lately."

McLuhan, Marshall, and Quentin Fiore. 1967. The Medium Is the Massage. Gingko Press.

Media acceleration & amplification

Slide 3

"modern media enhanced and extended the range and scope of those processes of invention and imitation that for him [Gabriel Tarde] constituted the essence of economic life" (p. 11)

... [but also] ...

"caused the processes of individuation that connect psychic and social life to be short-circuited, resulting in the destructive hegemony of the short term over the long term" (12).

Terranova, Tiziana. 2012. "Attention, Economy and the Brain." *Culture Machine* 13: 1–19.

### The dark side of Tarde's attention economy

Slide 4

Online attention hyper-synchronisation

1. an economy of ephemeral attention that sustains micro-transactions on infinitesimal attention spans;

2. tracking & recommending technologies that monitor and foster even the thinnest forms of media engagement;

3. social media metrics that encourage users to seek and share contents with high spreadability potential;

4. virality-oriented subcultures whose identity is defined by the capacity to spread Internet memes

5. the use of political trolling strategies to disrupt the conversations of political opponents.

Five overlapping sources of hyper-synchronisations

1

Economy of ephemeral attention
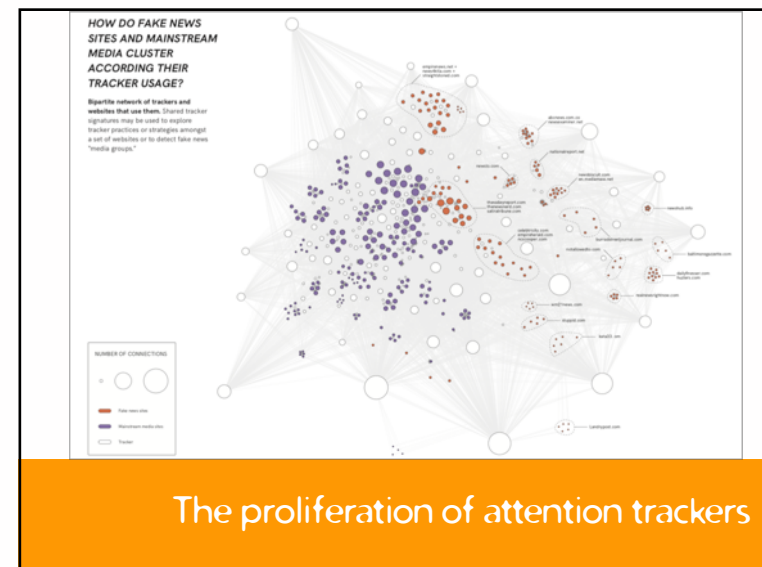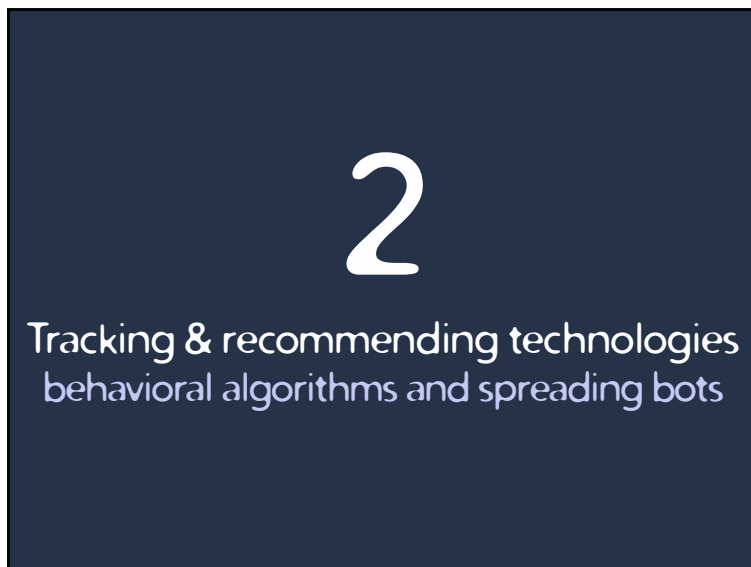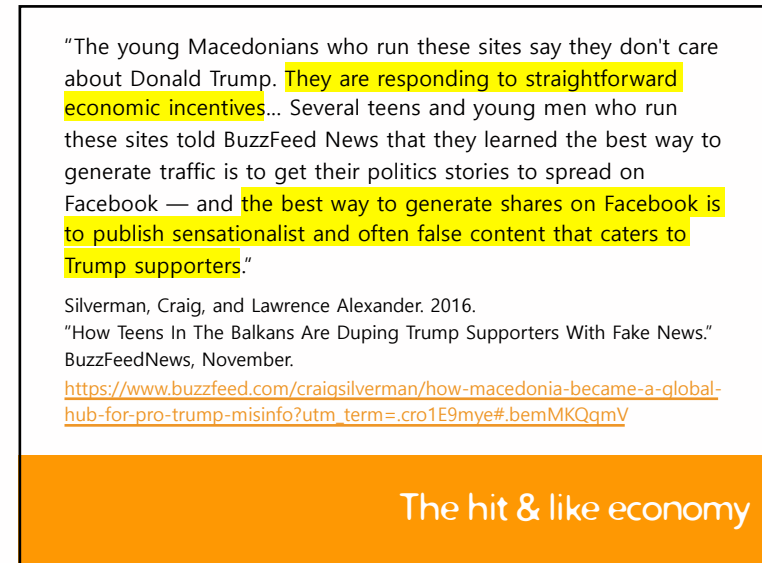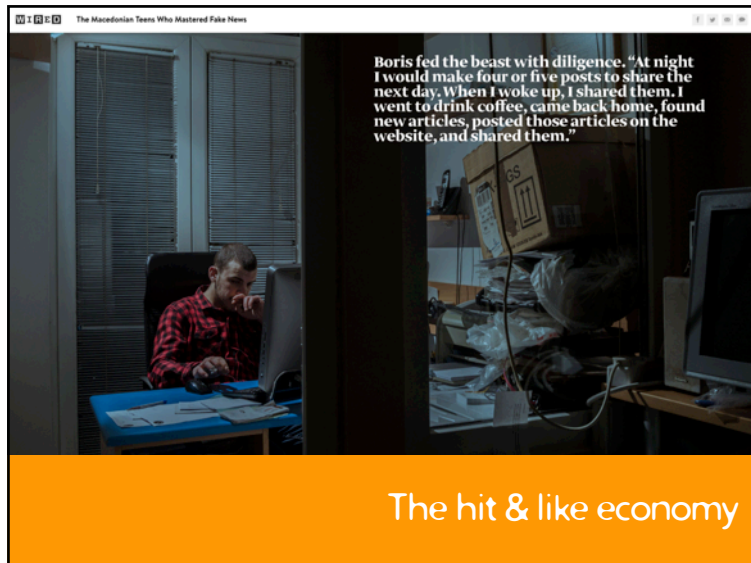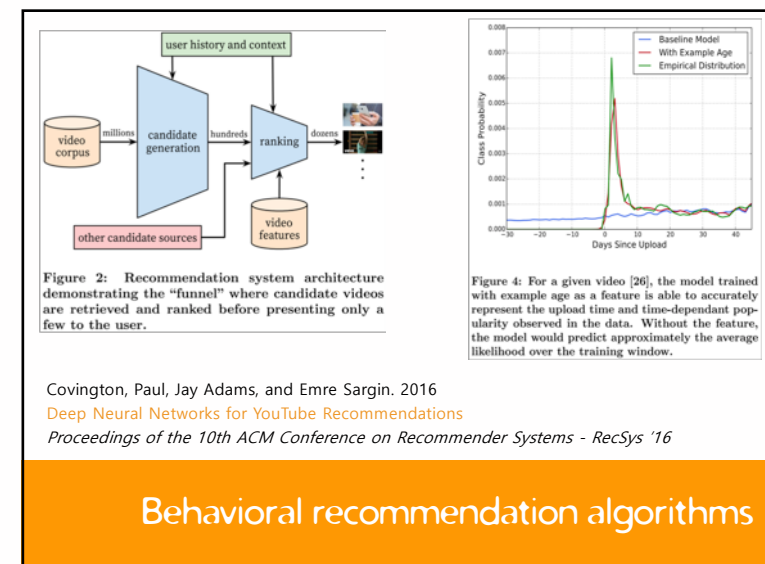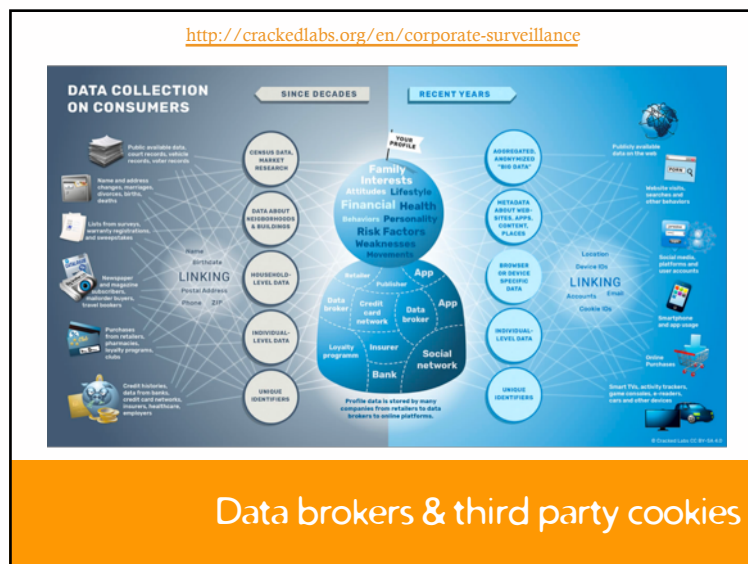### automatization of the online attention market
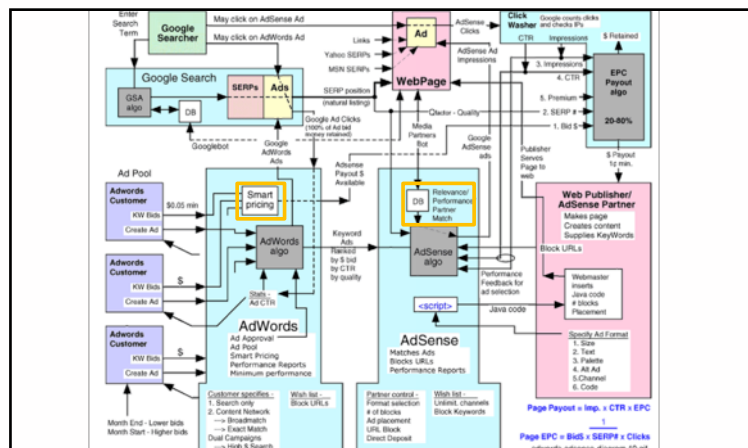
A market for attention economy
AdSense / AdWords & Page Rank

Google's success came from an understanding of what Chris Anderson refers to as "the long tail," the collective power of the small sites that make up the bulk of the web's content… The Web 2.0 lesson: leverage customer self-service and algorithmic data management to reach out to the entire web, to the edges and not just the center, to the long tail and not just the head (p.21)

O'Reilly, Tim. 2005. "What Is Web 2.0 - O'Reilly Media." http://oreilly.com/web2/archive/what-is-web-20.html.

Google Ad Network and the birth of the Web 2.0

Boris fed the beast with diligence. "At night I would make four or five posts to share the next day. When I woke up, I shared them. I went to drink coffee, came back home, found new articles, posted those articles on the website, and shared them."

The hit & like economy

"The young Macedonians who run these sites say they don't care about Donald Trump. They are responding to straightforward economic incentives... Several teens and young men who run these sites told BuzzFeed News that they learned the best way to generate traffic is to get their politics stories to spread on Facebook — and the best way to generate shares on Facebook is to publish sensationalist and often false content that caters to Trump supporters."

Silverman, Craig, and Lawrence Alexander. 2016.
"How Teens In The Balkans Are Duping Trump Supporters With Fake News."
BuzzFeedNews, November.
https://www.buzzfeed.com/craigsilverman/how-macedonia-became-a-global-hub-for-pro-trump-misinfo?utm_term=.cro1E9mye#.bemMKQqmV

The hit & like economy

2

Tracking & recommending technologies
behavioral algorithms and spreading bots

HOW DO FAKE NEWS SITES AND MAINSTREAM MEDIA CLUSTER ACCORDING THEIR TRACKER USAGE?

Bipartite network of trackers and websites that use them. Shared tracker signatures may be used to explore tracker practices or strategies amongst a set of websites or to detect fake news "media groups."

The proliferation of attention trackers

Serving different attention markets

The raise of click baiting and native advertising

http://crackedlabs.org/en/corporate-surveillance
Data brokers & third party cookies

Covington, Paul, Jay Adams, and Emre Sargin. 2016
Deep Neural Networks for YouTube Recommendations
Proceedings of the 10th ACM Conference on Recommender Systems - RecSys '16
Behavioral recommendation algorithms

3

Social media metrics
socialisation of a "prosumer" audience

Posters and lurkers

The rise of social buttons

And of social metrics

Personal branding and micro-celebrities

Two Step Flow Model (Katz & Lazarsfeld, 1955)

Vaccari, Cristian, and Augusto Valeriani. 2015. "Follow the Leader! Direct and Indirect Flows of Political Communication during the 2013 Italian General Election Campaign." *New Media and Society* 17 (7): 1025–42.

Two Step Flow

4

Virality-oriented subcultures
the rise of the meme magic

Pizzagate and LOLcats
4chan and virality oriented subcultures

Meme Magic Is Real, You Guys

I know you already have your explanation for Donald Trump being elected. But I'm telling you: it's false. He was elected because of Chaos Magick, Memes and a Frog-like creature named Lord Kek.

Theodor
Nov 12, 2016 · 12 min read

The King of Troll has won. That's it. Trolling clearly went from horse-shit to an art form in a matter of years. And now : it's a powerful political tool to become the commander in chief.
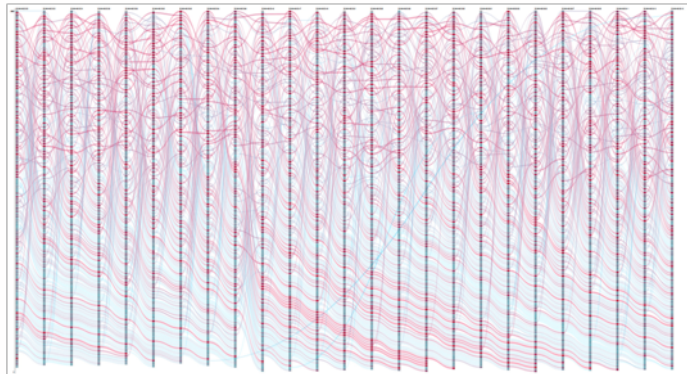
For some people, it has become religion : trolling is a way of life and Memes... are prayers.
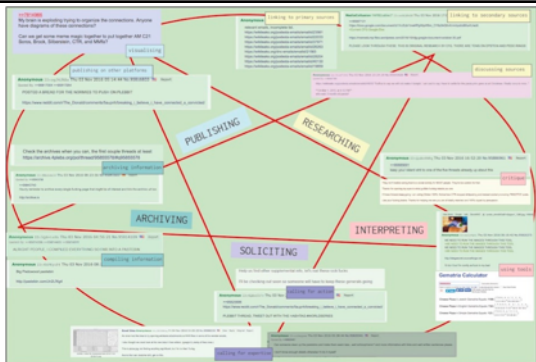
And yes, I'm talking about 4chan.

https://medium.com/tryangle-magazine/meme-magic-is-real-you-guys-16a497fc45b3

Meme magic

Hagen, Sal. 2018. "Rendering Legible the Ephemerality of 4chan/Pol/." Open Intelligence Lab
http://oilab.eu/rendering-legible-the-ephemerality-of-4chanpol/

## How 4chan promotes viral ephemerality

Tuters, Marc, Emilija Jokubauskaitė, and Daniel Bach. 2018. "Post-Truth Protest: How 4chan Cooked-up the Pizzagate Bullshit Introduction." *M/C Journal* 21 (3).
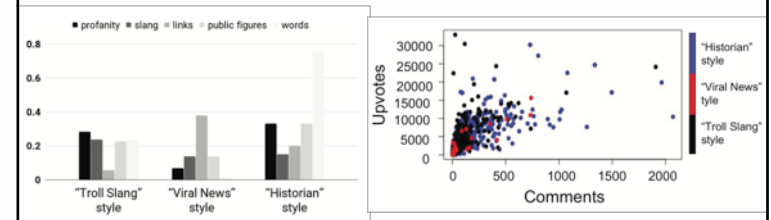http://journal.media-culture.org.au/index.php/mcjournal/article/view/1422.

The "Pizzagate" conspiracy theory

5
Political trolling
disruption of opponents' conversations and public debate
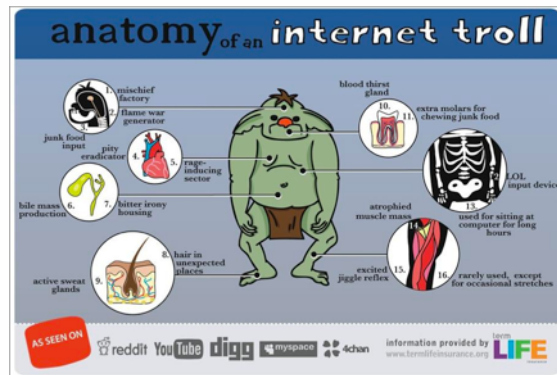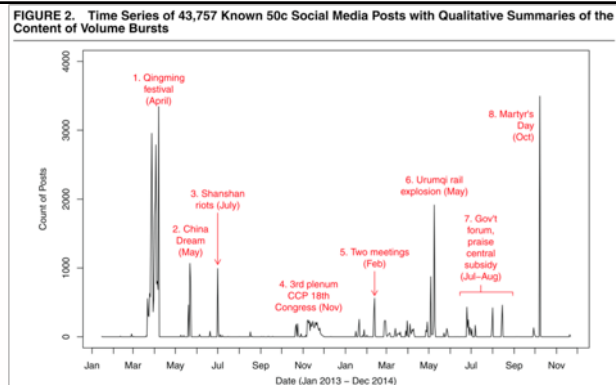
Flores-Saviaga, Claudia, Brian C. Keegan, and Saiph Savage. 2018. "Mobilizing the Trump Train: Understanding Collective Action in a Political Trolling Community," no. ICWSM: 82–91. http://arxiv.org/abs/1806.00429

King, G., Pan, J. & Roberts, M.E. (2017). How the Chinese Government Fabricates Social Media Posts for Strategic Distraction, Not Engaged Argument. *American Political Science Review*. 111 (3). pp. 484–501.

"the team doing this research… fail[s] to understand the legitimacy of "public opinion guidance" within the Chinese system…

traditional public opinion guidance systems don't seem to be pulling their weight when it comes to overcoming these problems. The Internet media space has an infinite capacity but its borders and its core are unclear, so some grassroots social issues are always able to suddenly attract the attention of the entire Internet, creating one hot button issue after another"

translation in King, G., Pan, J. & Roberts, M.E. (2017). How the Chinese Government Fabricates Social Media Posts for Strategic Distraction, Not Engaged Argument. *American Political Science Review*. 111 (3). pp. 484–501.

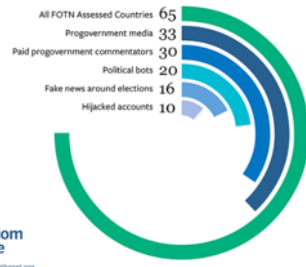opinion.huangiu.com/editorial/2016-05/8958840.html

Bots drown out activists with nonsense and hate speech

Prevalence of Manipulation Tactics in 65 Countries

All FOTN Assessed Countries 65
Progovernment media 33
Paid progovernment commentators 30
Political bots 20
Fake news around elections 16
Hijacked accounts 10

Freedom House
www.freedomonthenet.org

The 65 countries covered in *Freedom on the Net* represent 87 percent of the world's internet user population.

Political trolling VS fake news
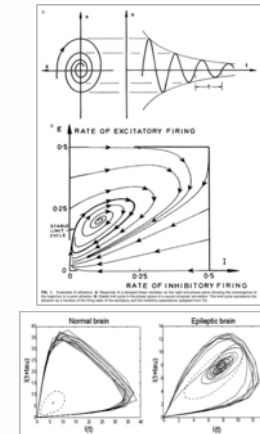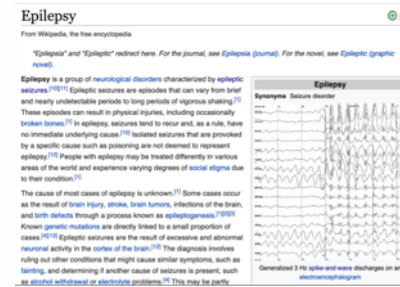

We still need to put all this together

Online attention hyper–synchronisation

Epilepsy
From Wikipedia, the free encyclopedia

Lopes da Silva, Fernando, Wouter Blanes, Stiliyan N Kalitzin, Jaime Parra, Piotr Suffczynski, and Demetrios N Velis. 2003. "Epilepsies as Dynamical Diseases of Brain Systems : Basic Models of the Transition Between Normal and Epileptic Activity." Epilepsia 44 (12): 72–83.

Learning from brain hyper–synchronisation

Slide 1

1. Epilepsy is not caused by an external infection, but by the amplification and accelerating of normal physiological mechanisms, typical brain functioning.

2. Seizures are catalysed by both metabolic and contextual factors, in ways that are:
   1. multi-dimensional
   2. reciprocal
   3. non-linear (accumulating until reaching a threshold).

Learning from brain hyper-synchronisation

Slide 2

Thank you!

+ Bounegru, Liliana, Jonathan Gray, Tommaso Venturini, and Michele Mauri. 2018. *A Field Guide to Fake News and Other Information Disorders. Amsterdam*: Public Data Lab.

+ Venturini, Tommaso. 2019. "From Fake to Junk News, the Data Politics of Online Virality." In *Data Politics: Worlds, Subjects, Rights*, edited by D. Bigo, E. Isin, and E. Ruppert, Forthcoming. London: Routledge.

+ Venturini, T. (2018). Sur l'étude des sujets populaires ou les confessions d'un spécialiste des fausses nouvelles. In P. Trudel (Ed.), *Les fausses nouvelles*. Presses de l'Université Laval. Gray,

+ Jonathan, Liliana Bounegru, and Tommaso Venturini. 2018. "The Infrastructural Uncanny: 'Fake News' and the Fabric of the Web as Matter of Concern." *New Media & Society*, forthcoming.

tommasoventurini.it

Slide 3

Merci !

tommasoventurini.it