

Analyzing the Facebook algorithm, and **reclaim** ~~data~~ **algorithm** sovereignty

<https://github.com/tracking-exposed/presentations/> 35C3 slides



Claudio Agosti

@_vecna

#fbTREX



Not
only!

Just the first!

<https://facebook.tracking.exposed>

2014 breaking news!
personalization algorithms **are a** tool of social control

Experimental evidence of massive-scale emotional contagion through social networks



Adam D. I. Kramer, Jamie E. Guillory, and Jeffrey T. Hancock

PNAS June 17, 2014 111 (24) 8788-8790; published ahead of print June 2, 2014 <https://doi.org/10.1073/pnas.1320040111>

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved March 25, 2014 (received for review October 23, 2013)

This article has corrections. Please see:

Editorial Expression of Concern: Experimental evidence of massive-scale emotional contagion through social networks

Judge your content curation!

What Happens to #Ferguson Affects Ferguson:



Zeynep Tufekci

Follow

Aug 14, 2014 · 6 min read

Net Neutrality, Algorithmic Filtering and Ferguson

*"And then I switched to non net-neutral Internet to see what was up.
Nada, zip, nada
No Ferguson on Facebook last night. I scrolled. Refreshed." -- Zeynep T.*



Caryn Vainio

@Hellchick

Follow



For those of you who work in social media, I need to share the story of my friend who died, and I didn't know because algorithms.

1:05 PM - 18 Dec 2017

<https://twitter.com/hellchick/status/942863353403150336>

2018: personalization algorithms **are still used** as a tool of social control

January 11, 2018

Bringing People Closer Together



"I'm changing the goal I give our product teams from focusing on helping you find relevant content to helping you have more meaningful social interactions"

- Mark Z.



A phenomena is growing, with different agendas

https://datasociety.net/	https://openai.com/	https://docs.ethically.ai/	https://github.com/daviddao/awful-ai
https://aiethicsinitiative.org/	https://www.partnershiponai.org/	http://auditingalgorithm.sciencelab.org/	http://algorithmtips.org/
https://algorithmwatch.org/	https://ainowinstitute.org/	https://www.algoaware.eu	https://ethicstoolkit.ai/
https://www.ailunited.org/	https://datajusticeproject.net/	https://cyber.harvard.edu/topics/ethics-and-governance-ai	https://algorithmobservatory.com
	http://algotransparency.org/	http://topiaethics.com/	

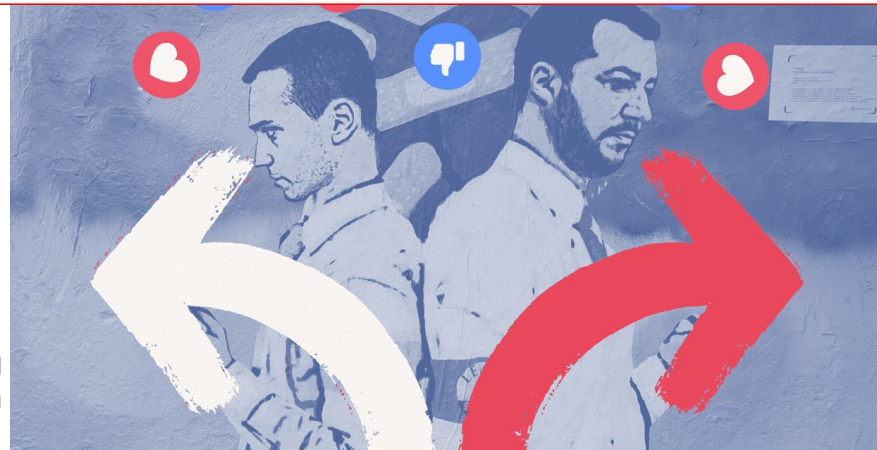
Can you spot the corporate lobbyists?



The new populism World news

Revealed: how Italy's populists used Facebook to win power

A mural in Milan depicts Luigi Di Maio, left, and Matteo Salvini using Facebook on their phones. Illustration: Guardian Design



They are both
vice prime
minister.

The issue is in
what this
article implies

engage = 

Luigi Di Maio and Matteo Salvini dominated Facebook during the 2018 election

Luigi Di Maio



Matteo Salvini



Giorgia Meloni



Matteo Renzi



Silvio Berlusconi



Pietro Grasso



Source: Facebook data analysed University of Pisa's MediaLab and University of Milan. Note: data spans 1 January to 3 March 2018

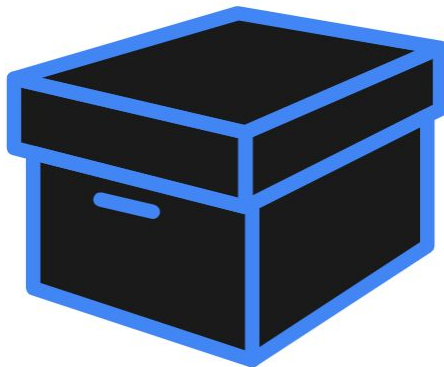
"The Facebook data, which captured the engagement metrics on thousands of posts by the six major party leaders in the two months leading up to the election"

Warning:

variables of different natures



Money to produce
(and promote?)
content




Facebook hidden
design choices



what we want, can
wanting and voting

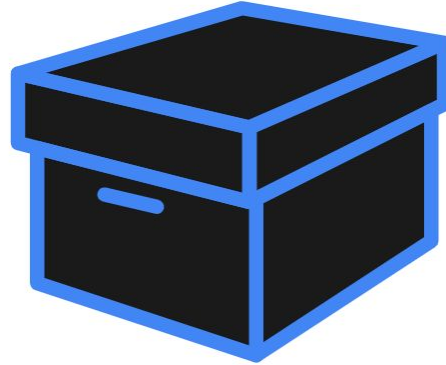
Hackers don't (look at) *likes*

-  is a petty way to measure anything
- If we use the metric provided by the system of oppression, we have already lost

Look at them as components



People producing
content for
Facebook



Facebook prioritization





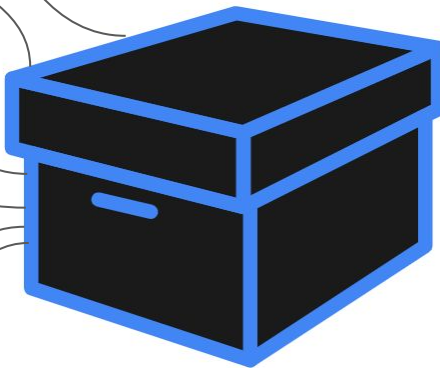
People reading
Facebook

A passive actor with an agenda

Source
(page, friends)

Produced
today

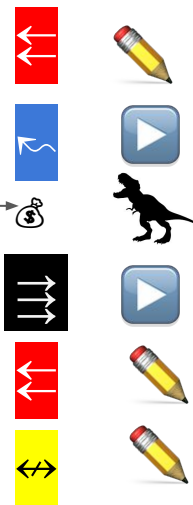
	 5  2
	 1
	 8
	 1  1



"I know what you want!"



At 6 PM the user connects, and Facebook build a **personalized timeline**

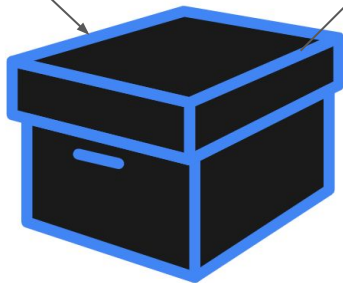


We expose how tracking and
profiting from user data had a
negative impact on society.

To do this, we collect *evidence*



People
producing
content for
Facebook



Keep track of what
Facebook is selecting for
you



People on Facebook With our
Browser Extension installed




We expose how tracking and
profiting from user data had a
negative impact on society.

IS HARD!

Black-box testing is reducing variables



We made few accounts:


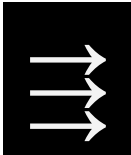

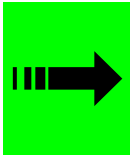


- with zero friends
- same access frequency
- Time scope: elections 



The accounts:

- follow the same (30) pages
- Like **them differently**

Looks like a **bot**, but...

Santiago	Michiele	Antonietta	Britta	Andrea	Oliviero
					
 center left	far right	left	5star	right	undecided

An auto-scroller lets the bots collect the same amount of samples

Santiago



Michiele



Antonietta



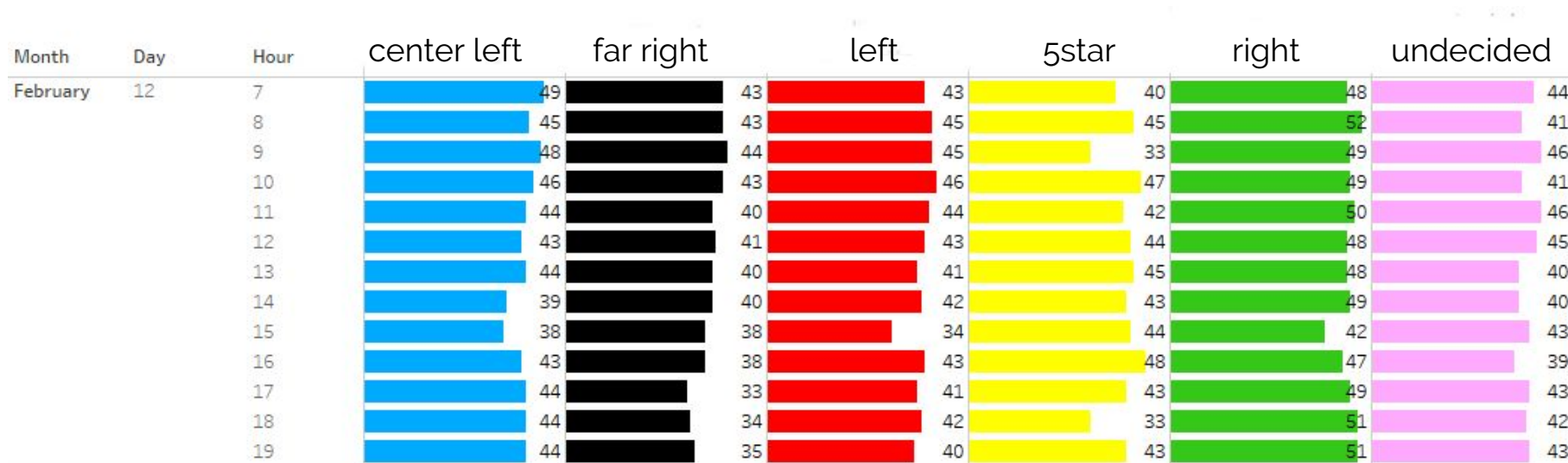
Britta



Andrea



Oliviero



A tampermonkey user script <https://facebook.tracking.exposed/autoscroll.user.js>

How to visualize an algorithm? Look for patterns!

Santiago



Michiele



Antonietta



Britta



Andrea



Oliviero??



Month	Day	type	center left	far right	left	5star	right	undecided
February	8	photo	39.10%	53.80%	33.45%	25.85%	21.62%	30.18%
		post	57.90%	38.19%	64.92%	69.88%	74.49%	59.17%
		video	3.00%	8.01%	1.63%	4.28%	3.89%	10.65%
	9	photo	36.70%	62.03%	38.29%	27.76%	23.22%	21.76%
		post	58.61%	32.70%	60.98%	67.41%	69.15%	60.88%
		video	4.70%	5.27%	0.73%	4.83%	7.63%	17.37%
	10	photo	38.81%	63.02%	36.25%	28.79%	18.34%	29.06%
		post	57.52%	29.42%	61.07%	66.72%	75.24%	58.11%
		video	3.67%	7.55%	2.68%	4.48%	6.43%	12.83%
	11	photo	33.93%	58.47%	34.87%	27.12%	18.99%	29.16%
		post	62.84%	33.33%	62.74%	69.26%	73.60%	56.45%
		video	3.23%	8.19%	2.39%	3.63%	7.40%	14.39%
	12	photo	36.25%	61.91%	38.62%	34.36%	17.22%	29.66%
		post	60.25%	30.86%	59.20%	63.09%	78.04%	58.23%
		video	3.50%	7.23%	2.19%	2.55%	4.74%	12.12%
	13	photo	44.76%	63.24%	42.06%	34.00%	22.62%	31.65%
		post	52.22%	33.00%	56.45%	63.80%	71.45%	55.92%
		video	3.02%	3.75%	1.50%	2.19%	5.93%	12.43%
	14	photo	44.72%	53.78%	38.49%	36.28%	29.07%	28.65%
		post	51.16%	41.63%	58.61%	60.53%	62.30%	58.00%
		video	4.11%	4.58%	2.90%	3.19%	8.63%	13.36%

Is it true across the day?

Santiago 

Michiele 

Antonietta 

Britta 

Andrea 

Oliviero 

center left

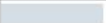
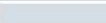




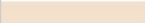

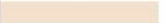

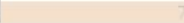












































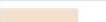
















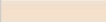





















































far right

left

5star

right

undecided

Month	Day of	type	center left		far right		left		5star		right		undecided	
February	8	photo		39.10%		53.80%		33.45%		25.85%		21.62%		30.18%
		post		57.90%		38.19%		64.92%		69.88%		74.49%		59.17%
		video		3.00%		8.01%		1.63%		4.28%		3.89%		10.65%
	9	photo		36.70%		62.03%		38.29%		27.76%		23.22%		21.76%
		post		58.61%		32.70%		60.98%		67.41%		69.15%		60.88%
		video		4.70%		5.27%		0.73%		4.83%		7.63%		17.37%
	10	photo		38.81%		63.02%		36.25%		28.79%		18.34%		29.06%
		post		57.52%		29.42%		61.07%		66.72%		75.24%		58.11%
		video		3.67%		7.55%		2.68%		4.48%		6.43%		12.83%
	11	photo		33.93%		58.47%		34.87%		27.12%		18.99%		29.16%
		post		62.84%		33.33%		62.74%		69.26%		73.60%		56.45%
		video		3.23%		8.19%		2.39%		3.63%		7.40%		14.39%
	12	photo		36.25%		61.91%		38.62%		34.36%		17.22%		29.66%
		post		60.25%		30.86%		59.20%		63.09%		76.04%		58.23%
		video		3.50%		7.23%		2.19%		2.55%		4.74%		12.12%
	13	photo		44.76%		63.24%		42.06%		34.00%		22.62%		31.65%
		post		52.22%		33.00%		56.45%		63.80%		71.45%		55.92%
		video		3.02%		3.75%		1.50%		2.19%		5.93%		12.43%
	14	photo		44.72%		53.76%		38.49%		36.28%		29.07%		28.65%
		post		51.16%		41.63%		58.61%		60.53%		62.30%		58.00%
		video		4.11%		4.58%		2.90%		3.19%		8.63%		13.36%

comparing the content types is a metric now

Santiago



Michiele



Antonietta



Britta



Andrea



Oliviero

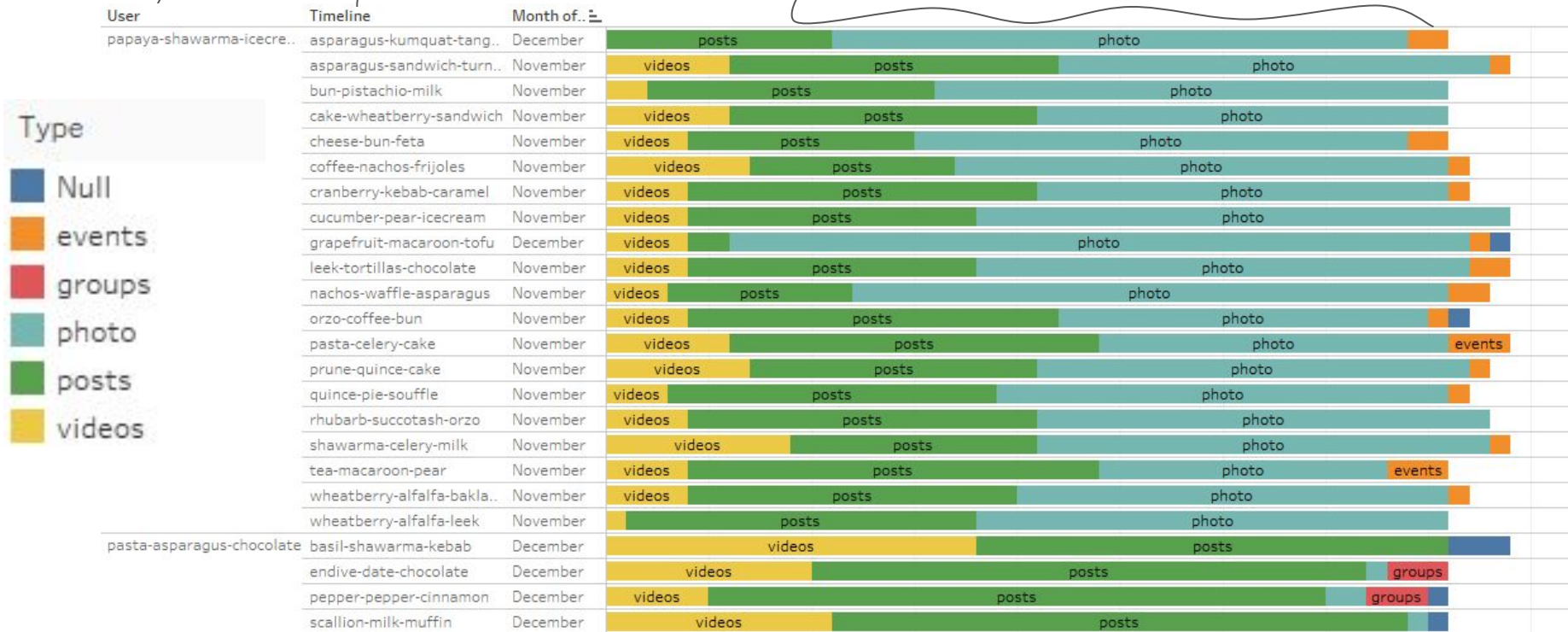


Month	Day	Hour	type	center left	far right	left	5star	right	undecided
February	9	7	photo	<div><div></div></div> 17.78%	<div><div></div></div> 44.44%	<div><div></div></div> 38.10%	<div><div></div></div> 20.51%	<div><div></div></div> 20.41%	<div><div></div></div> 9.30%
			post	<div><div></div></div> 73.33%	<div><div></div></div> 47.22%	<div><div></div></div> 61.90%	<div><div></div></div> 74.36%	<div><div></div></div> 69.39%	<div><div></div></div> 60.47%
			video	<div><div></div></div> 8.89%	<div><div></div></div> 8.33%	<div><div></div></div> 5.13%	<div><div></div></div> 5.13%	<div><div></div></div> 10.20%	<div><div></div></div> 30.23%
	8	photo	<div><div></div></div> 22.22%	<div><div></div></div> 52.78%	<div><div></div></div> 36.36%	<div><div></div></div> 28.26%	<div><div></div></div> 23.40%	<div><div></div></div> 16.28%	
		post	<div><div></div></div> 68.89%	<div><div></div></div> 38.89%	<div><div></div></div> 63.64%	<div><div></div></div> 65.22%	<div><div></div></div> 70.21%	<div><div></div></div> 62.79%	
		video	<div><div></div></div> 8.89%	<div><div></div></div> 8.33%	<div><div></div></div> 6.52%	<div><div></div></div> 6.52%	<div><div></div></div> 6.38%	<div><div></div></div> 20.93%	
	9	photo	<div><div></div></div> 35.71%	<div><div></div></div> 55.56%	<div><div></div></div> 44.74%	<div><div></div></div> 30.00%	<div><div></div></div> 12.50%	<div><div></div></div> 34.21%	
		post	<div><div></div></div> 54.76%	<div><div></div></div> 38.89%	<div><div></div></div> 52.63%	<div><div></div></div> 65.00%	<div><div></div></div> 81.25%	<div><div></div></div> 47.37%	
		video	<div><div></div></div> 9.52%	<div><div></div></div> 5.56%	<div><div></div></div> 2.63%	<div><div></div></div> 5.00%	<div><div></div></div> 6.25%	<div><div></div></div> 18.42%	
	10	photo	<div><div></div></div> 42.86%	<div><div></div></div> 55.88%	<div><div></div></div> 42.86%	<div><div></div></div> 31.11%	<div><div></div></div> 28.00%	<div><div></div></div> 28.57%	
		post	<div><div></div></div> 52.38%	<div><div></div></div> 41.18%	<div><div></div></div> 54.76%	<div><div></div></div> 66.67%	<div><div></div></div> 64.00%	<div><div></div></div> 47.62%	
		video	<div><div></div></div> 4.76%	<div><div></div></div> 2.94%	<div><div></div></div> 2.38%	<div><div></div></div> 2.22%	<div><div></div></div> 8.00%	<div><div></div></div> 23.81%	
	11	photo	<div><div></div></div> 42.31%	<div><div></div></div> 61.11%	<div><div></div></div> 52.38%	<div><div></div></div> 34.04%	<div><div></div></div> 29.55%	<div><div></div></div> 25.58%	
		post	<div><div></div></div> 53.85%	<div><div></div></div> 33.33%	<div><div></div></div> 47.62%	<div><div></div></div> 63.83%	<div><div></div></div> 52.27%	<div><div></div></div> 51.16%	
		video	<div><div></div></div> 3.85%	<div><div></div></div> 5.56%	<div><div></div></div> 2.13%	<div><div></div></div> 2.13%	<div><div></div></div> 18.18%	<div><div></div></div> 23.26%	
	12	photo	<div><div></div></div> 38.30%	<div><div></div></div> 63.16%	<div><div></div></div> 45.24%	<div><div></div></div> 30.43%	<div><div></div></div> 38.10%	<div><div></div></div> 23.91%	
		post	<div><div></div></div> 59.57%	<div><div></div></div> 31.58%	<div><div></div></div> 54.76%	<div><div></div></div> 63.04%	<div><div></div></div> 54.76%	<div><div></div></div> 56.52%	
		video	<div><div></div></div> 2.13%	<div><div></div></div> 5.26%	<div><div></div></div> 6.52%	<div><div></div></div> 6.52%	<div><div></div></div> 7.14%	<div><div></div></div> 19.57%	
	13	photo	<div><div></div></div> 47.62%	<div><div></div></div> 68.42%	<div><div></div></div> 36.96%	<div><div></div></div> 21.74%	<div><div></div></div> 26.19%	<div><div></div></div> 19.05%	
		post	<div><div></div></div> 50.00%	<div><div></div></div> 26.32%	<div><div></div></div> 60.87%	<div><div></div></div> 69.57%	<div><div></div></div> 71.43%	<div><div></div></div> 61.90%	
		video	<div><div></div></div> 2.38%	<div><div></div></div> 5.26%	<div><div></div></div> 2.17%	<div><div></div></div> 8.70%	<div><div></div></div> 2.38%	<div><div></div></div> 19.05%	
	14	photo	<div><div></div></div> 35.71%	<div><div></div></div> 68.42%	<div><div></div></div> 33.33%	<div><div></div></div> 26.19%	<div><div></div></div> 27.50%	<div><div></div></div> 27.50%	
		post	<div><div></div></div> 61.90%	<div><div></div></div> 26.32%	<div><div></div></div> 64.44%	<div><div></div></div> 69.05%	<div><div></div></div> 70.00%	<div><div></div></div> 57.50%	
		video	<div><div></div></div> 2.38%	<div><div></div></div> 5.26%	<div><div></div></div> 2.22%	<div><div></div></div> 4.76%	<div><div></div></div> 2.50%	<div><div></div></div> 15.00%	
	15	photo	<div><div></div></div> 42.86%	<div><div></div></div> 69.44%	<div><div></div></div> 41.03%	<div><div></div></div> 30.95%	<div><div></div></div> 40.48%	<div><div></div></div> 32.43%	
		post	<div><div></div></div> 52.38%	<div><div></div></div> 25.00%	<div><div></div></div> 58.97%	<div><div></div></div> 61.90%	<div><div></div></div> 54.76%	<div><div></div></div> 56.76%	
		video	<div><div></div></div> 4.76%	<div><div></div></div> 5.56%	<div><div></div></div> 7.14%	<div><div></div></div> 7.14%	<div><div></div></div> 4.76%	<div><div></div></div> 10.81%	
	16	photo	<div><div></div></div> 41.46%	<div><div></div></div> 63.89%	<div><div></div></div> 35.90%	<div><div></div></div> 28.26%	<div><div></div></div> 20.83%	<div><div></div></div> 16.67%	
		post	<div><div></div></div> 56.10%	<div><div></div></div> 30.56%	<div><div></div></div> 64.10%	<div><div></div></div> 69.57%	<div><div></div></div> 68.75%	<div><div></div></div> 73.81%	
		video	<div><div></div></div> 2.44%	<div><div></div></div> 5.56%	<div><div></div></div> 2.17%	<div><div></div></div> 10.42%	<div><div></div></div> 9.52%		

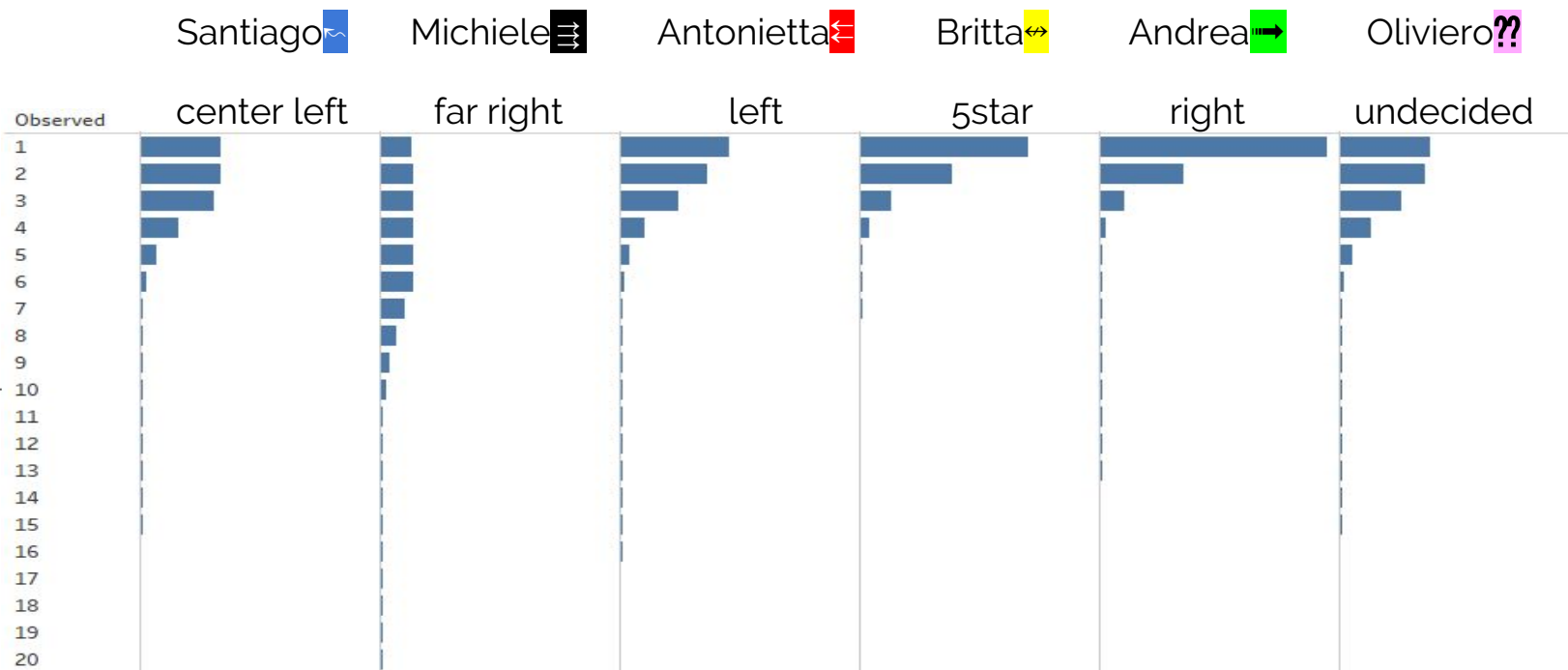
We have a metric!? We can test it with people

pseudorandom Id

Number of public post per timeline



Another metric: repetition of the same post (1st)

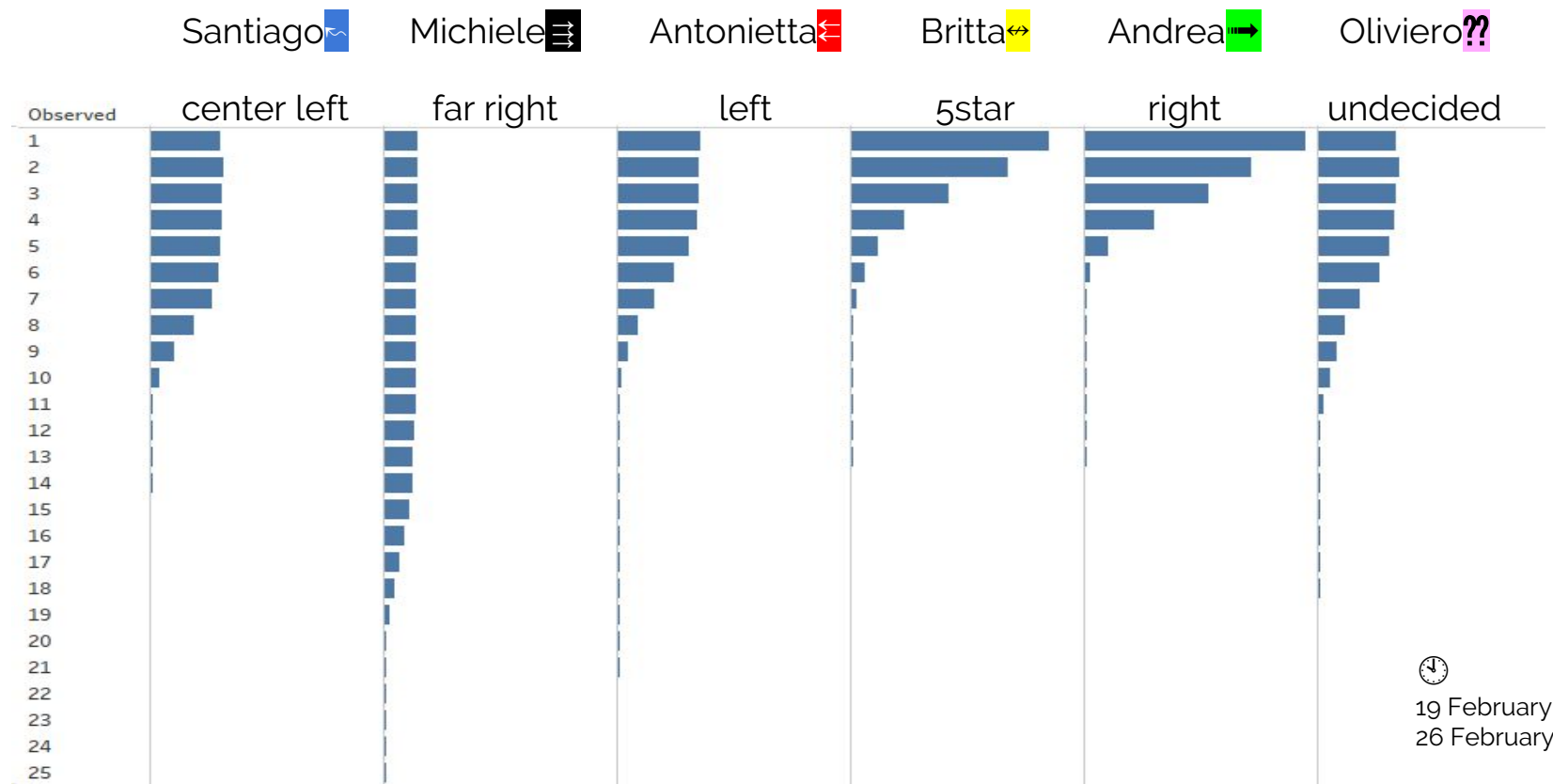


Number of times the same post has been observed.
repeated by Facebook despite fresh content available



8 February
14 February

Another metric: repetition of the same post (2nd)

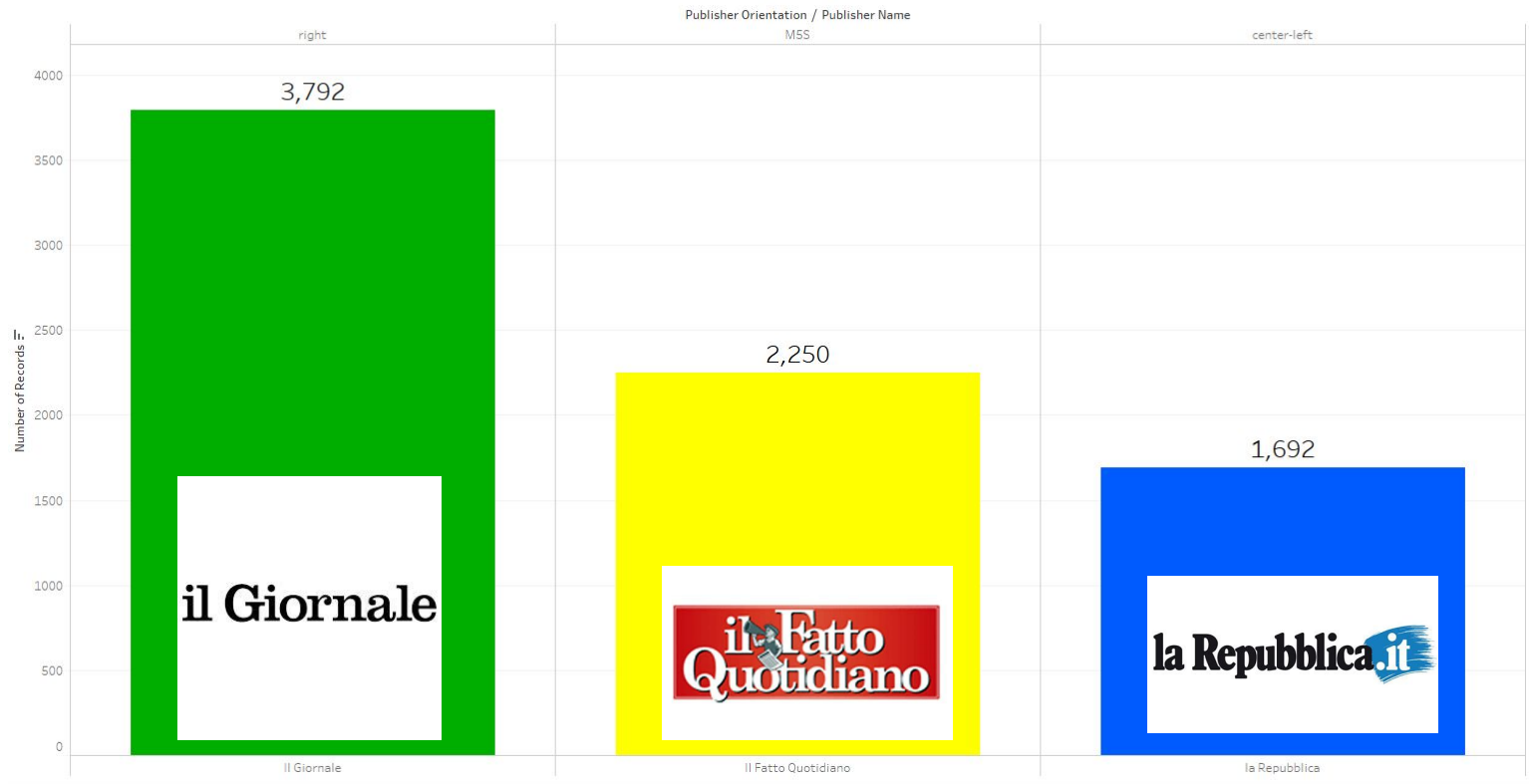


The **algorithm monopoly**
is an **issue** for a multitude
of entities...

Specially **for those who**
invests on the platform.

Compare 100% of the posts made by newspapers

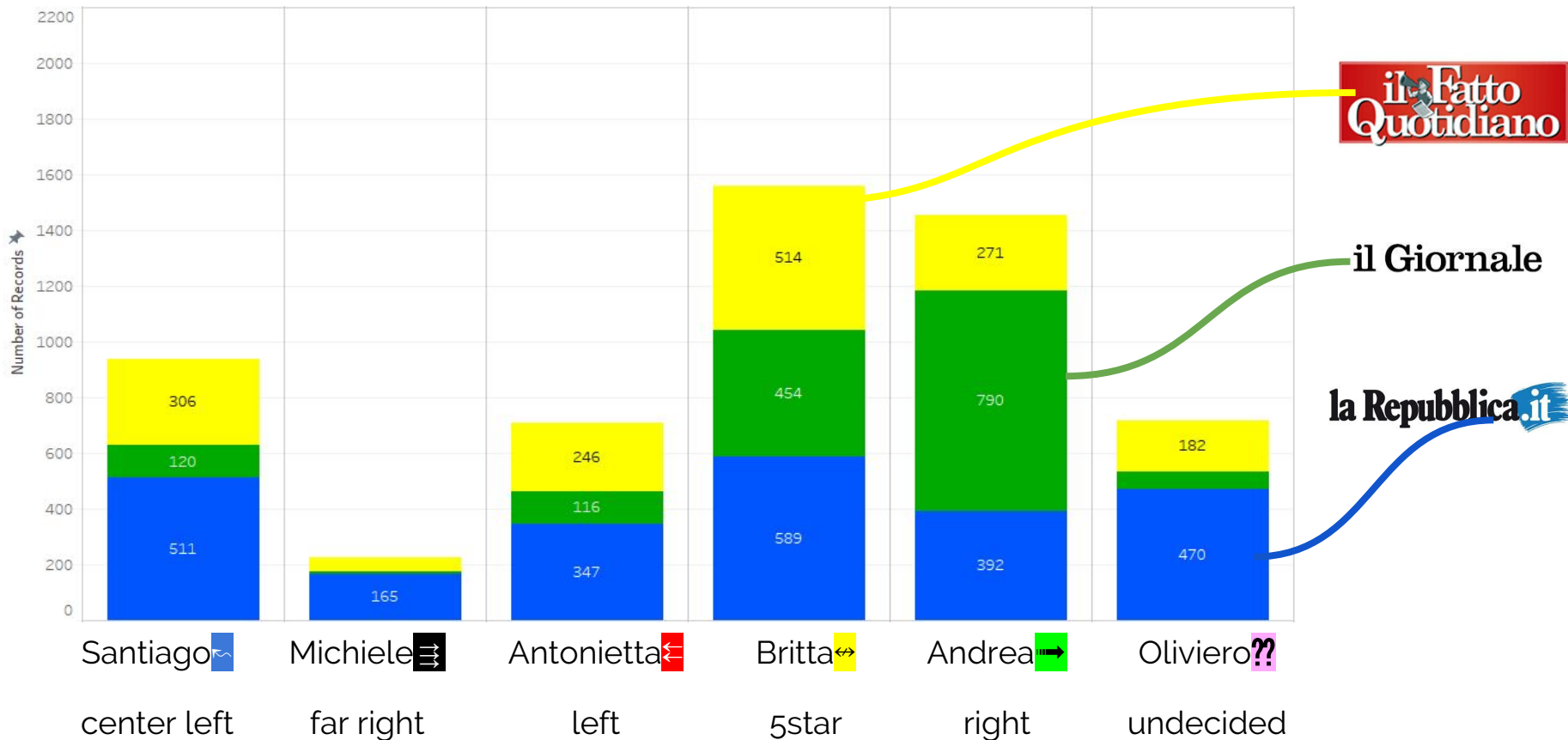
Published posts by three selected media



There is no fair treatment to anyone



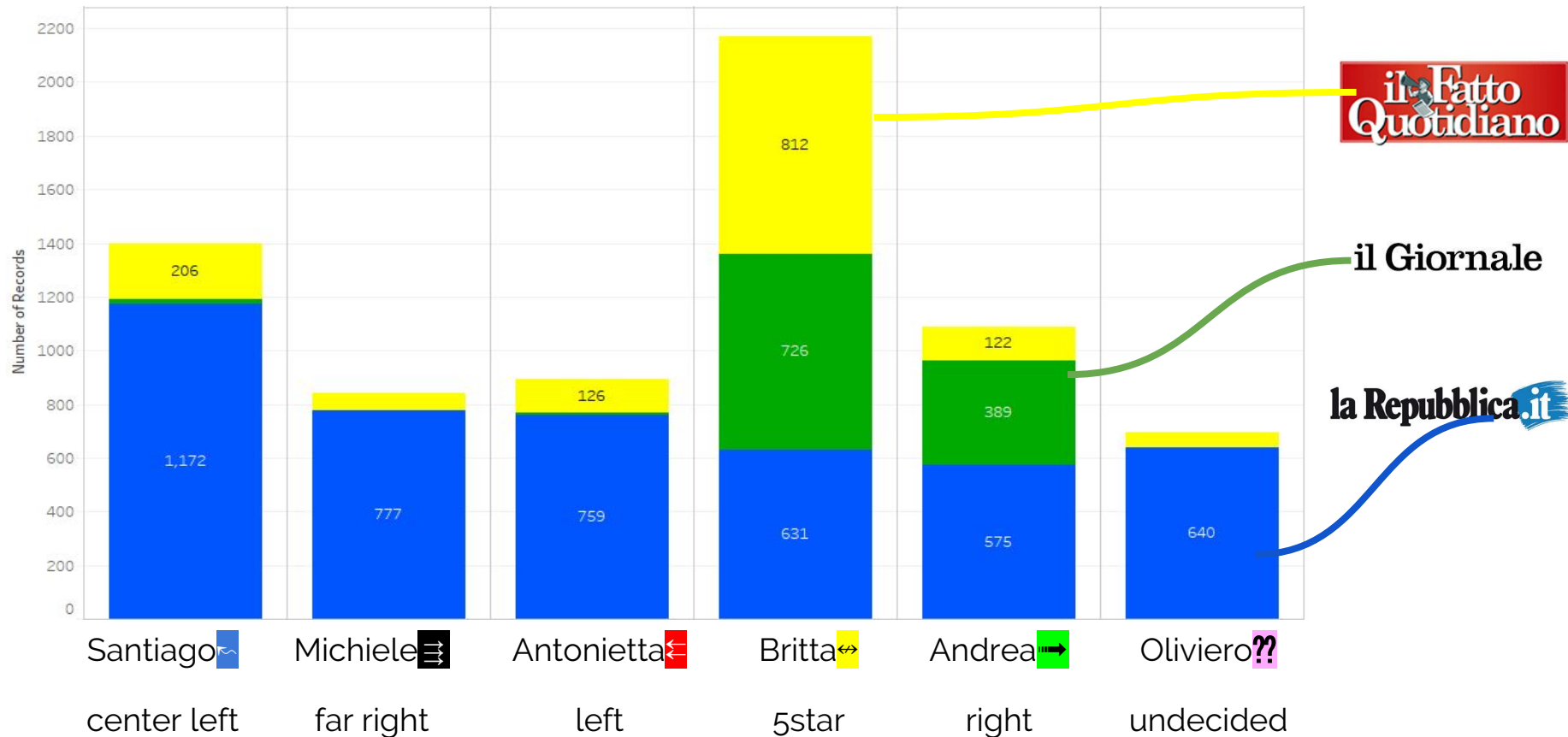
8 February
14 February



There is no fair treatment to anyone



19 February
26 February



empowering masses causes issues ㄟ(ツ)ㄏ



Astronomer Copernicus, conversation with God.



Galileo facing the Roman Inquisition.

<https://www.openrightsgroup.org/blog/2018/facebook-don%E2%80%99t-want-you-to-know-how-their-algorithm-works>



tracking.exposed: investigating algorithms
Version 1.1.15

Extension

Jul 17, 2018

★ 5

316

TAKEN DOWN

Shared knowledge

We think the greatest equalizer between users and companies is knowledge.

This is why we advocate for an open approach and to share what we know.

we used elections to humanize our story

- But algorithms are playing everyday
 - We want to enable others
- It's the rare time when it's the Global North that feels exploited

A simple method

1. If you are following this talk and understanding: **you know enough to try this**
2. If you know any conflict in which you are part of: **that's the narrative**
3. We can help you figure out a simple methodology to measure how the algorithm has an impact in your conflict.

Public Service Announcement

Dear friend,
thanks for supporting the [facebook.tracking.exposed](#) initiative.

We care a lot about your privacy and we want to be as transparent as possible, that's why:

- The extension only see and collects the **public posts**. You will know that public posts are being recorded by a notification highlighting them in your newsfeed.
- We have a [Privacy Statement](#) that describes what data we collect, and why.
- We release only [free, open source code](#) everyone can audit.
- **Access to your data**, available to be downloaded or consulted (is a work in progress!). It contains what Facebook is showing you. In the 2017 will be improved with new visualizations and functionalities.

Settings

I'm part of a study group ☒

ThisIsThe GroupCodeName

Hide the banner on top of the posts ☐

SAVE AND RELOAD CANCEL

1st, open

2nd, check

3rd, write+save

Research group

1. Can *tag* the contribution with a special codename
2. By knowing the codename the collections can be retrieved
3. Bots, humans, cyborg, autoscrolling or not: build your method!

"Franchise Prequel" is the fourth episode of [Season Twenty-One](#), and the 281st episode of [South Park](#). It aired on October 11, 2017



Don't #deleteFacebook
Give your profile
to science!



Available in the
Chrome Web Store

Responsible use of technology

We recognise that technology has the opportunity to elevate human potential, but we think this pursuit cannot be separated from serious responsibilities.

fbTREX != SOCMINT

- We observe only the **NewsFeed, not individual profiles or pages.**
- <https://facebook.com/>

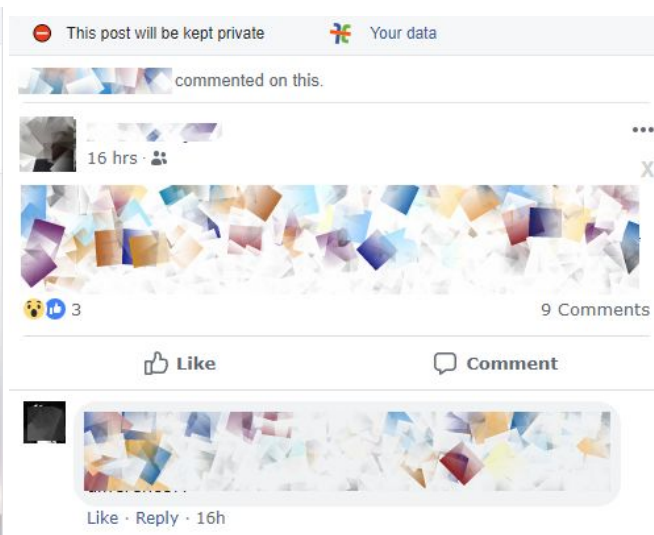
Respect people's choices

- We observe only public posts
 - + It is compliant with ToS
- GDPR demands more
 - + We consider timeline a PII




Respect people's choices

- Privacy settings is the only client-side check

<https://github.com/tracking-exposed/web-extension/blob/master/src/scrape.js#L27>



Respect people's choices

Peer reviewed!	Our tests Selected public sources (politician, media, parties)	Other adopters (like you)
	github/tracking-exposed (kaggle?)	Collected & Protected
	Not collected	Not collected
	Not collected	Not collected

Adopters ^{should} have exemplary control

- The data observed by your profiles are yours
- You would know how they are used in aggregated analysis

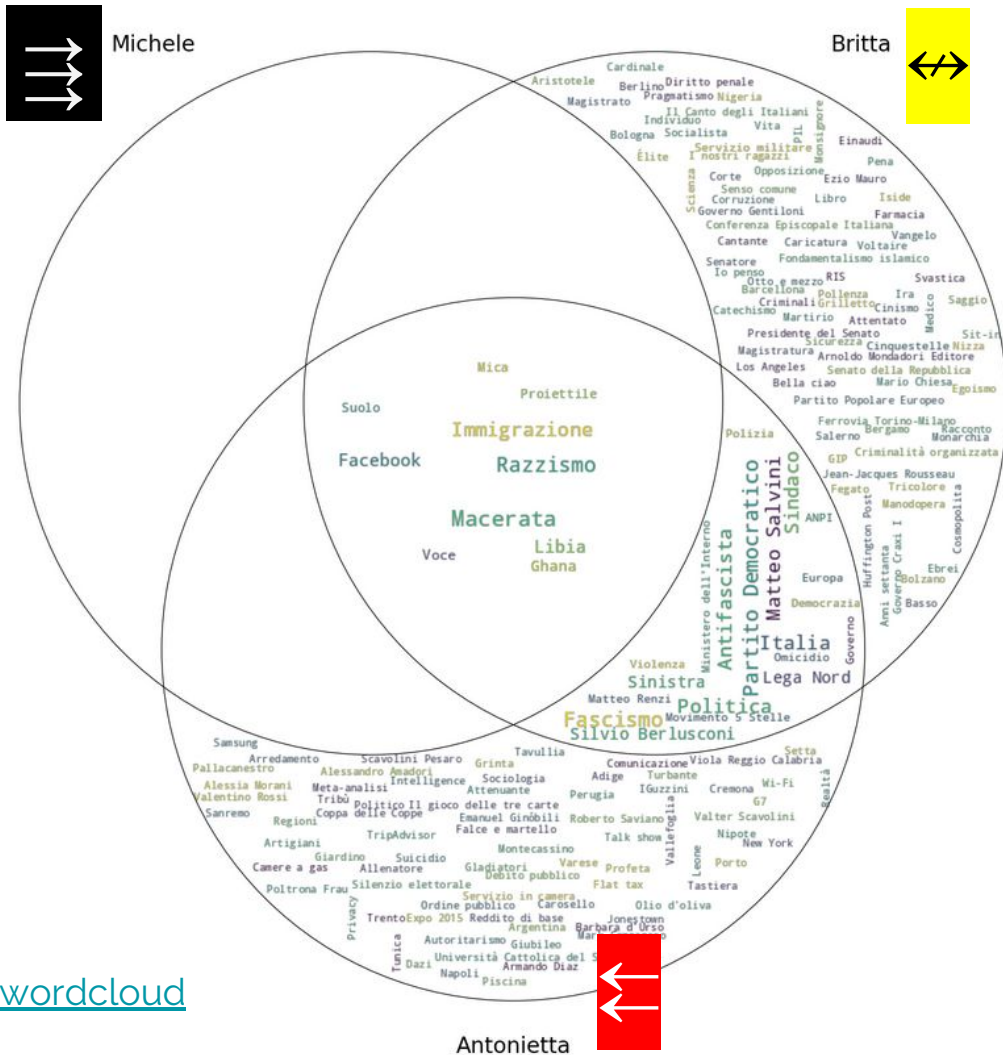
Adopters ^{should} have exemplary control

- To be improved before the next campaign:
 - let data retention policy be customizable
 - *delete* operations are still manual
 - We don't have "users" but publicKeys. We should stabilize our specs about.

Adopters can share portions of their informative experiences

- Strictly opt-in basis by each user involved
- On a case by case

We want to show this



<https://github.com/tracking-exposed/venn-wordcloud>

map-reduce runs on our DB

- **No** third-party **access**, **yes** third-party **code**
- Analysis that are run on the dataset will be aimed at understanding social phenomena, not individual behaviours.
 - This can't be formally verified.



Wolfie Christl

@WolfieChristl

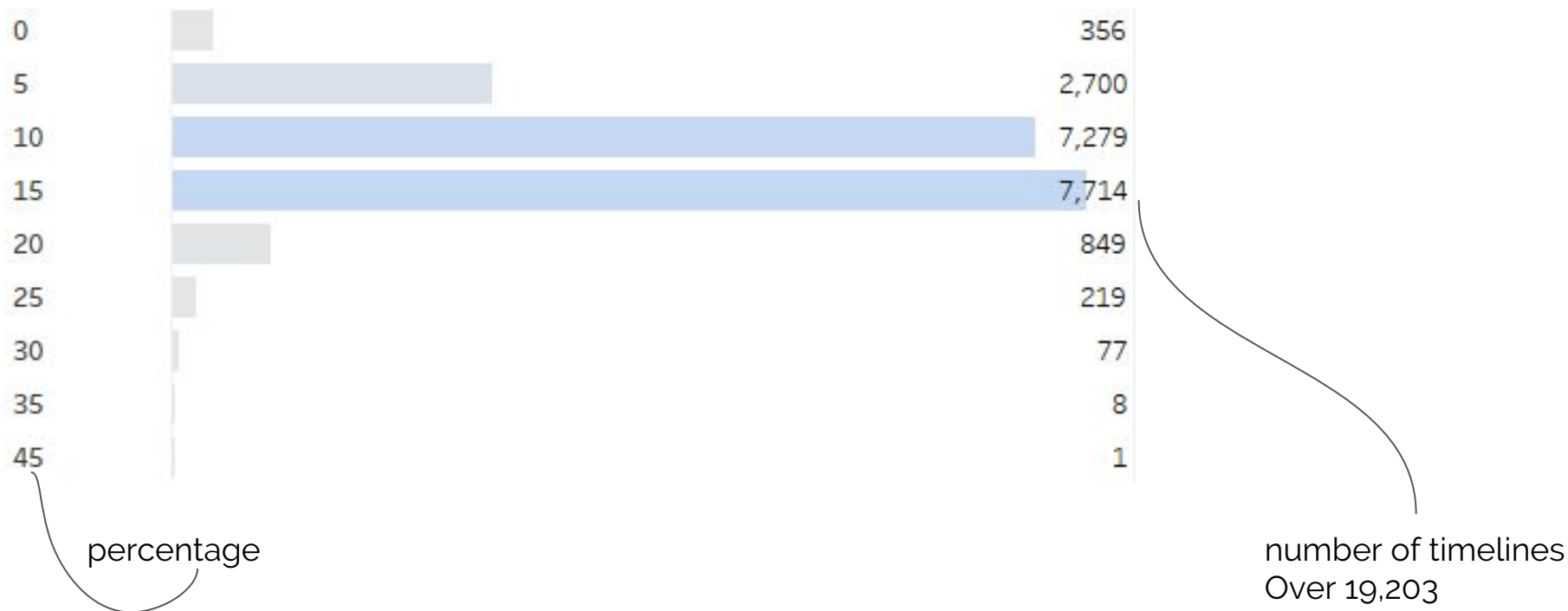
1 in 4 posts in my @facebook newsfeed are paid ads now. I feel like FB has rapidly increased the number of 'sponsored' posts and is becoming totally unusable.

Is there any data on the average share of 'sponsored' posts FB has been showing to users over time?

9:23 PM · Nov 11, 2018 · Twitter Web Client

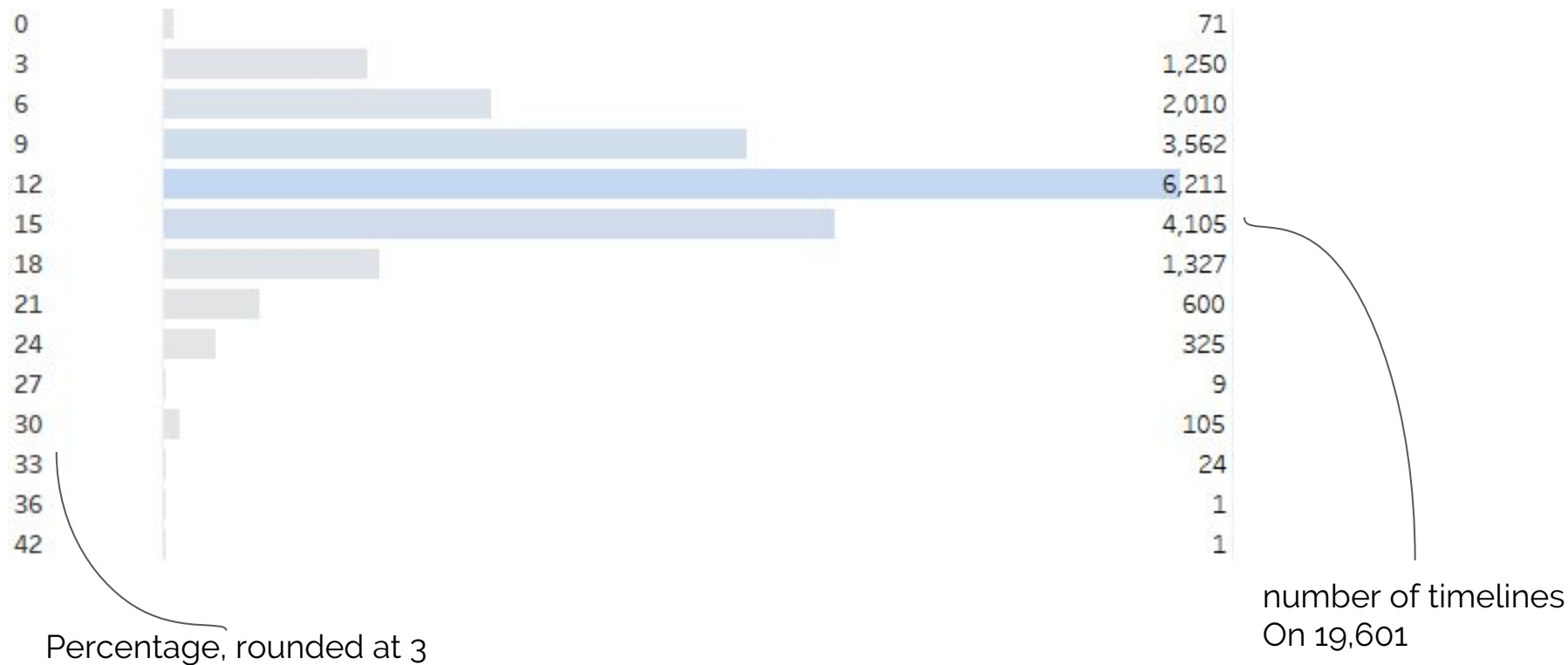
This how a
research
question
looks like

Percentage of advertising per timeline, January 2018



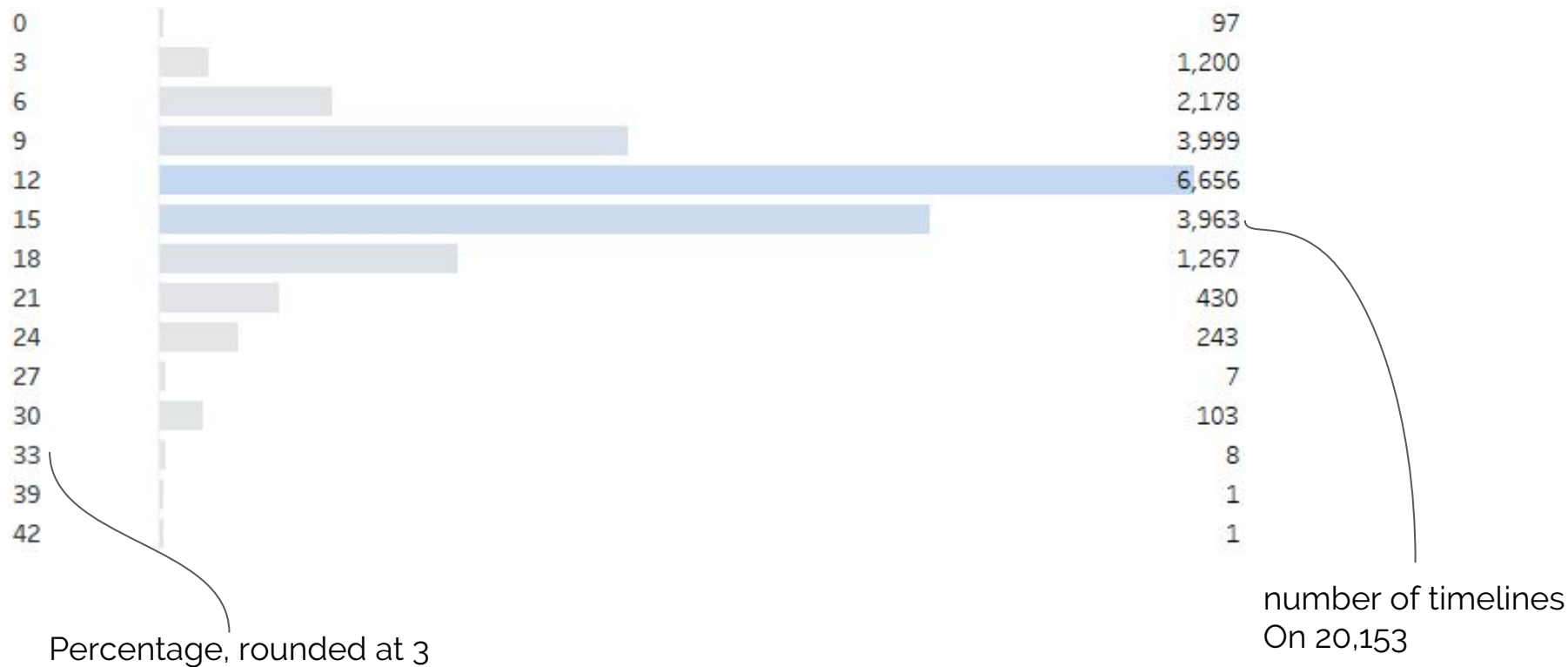
Considering only timelines with > 5 impressions

Percentage of advertising per timeline, February 2018



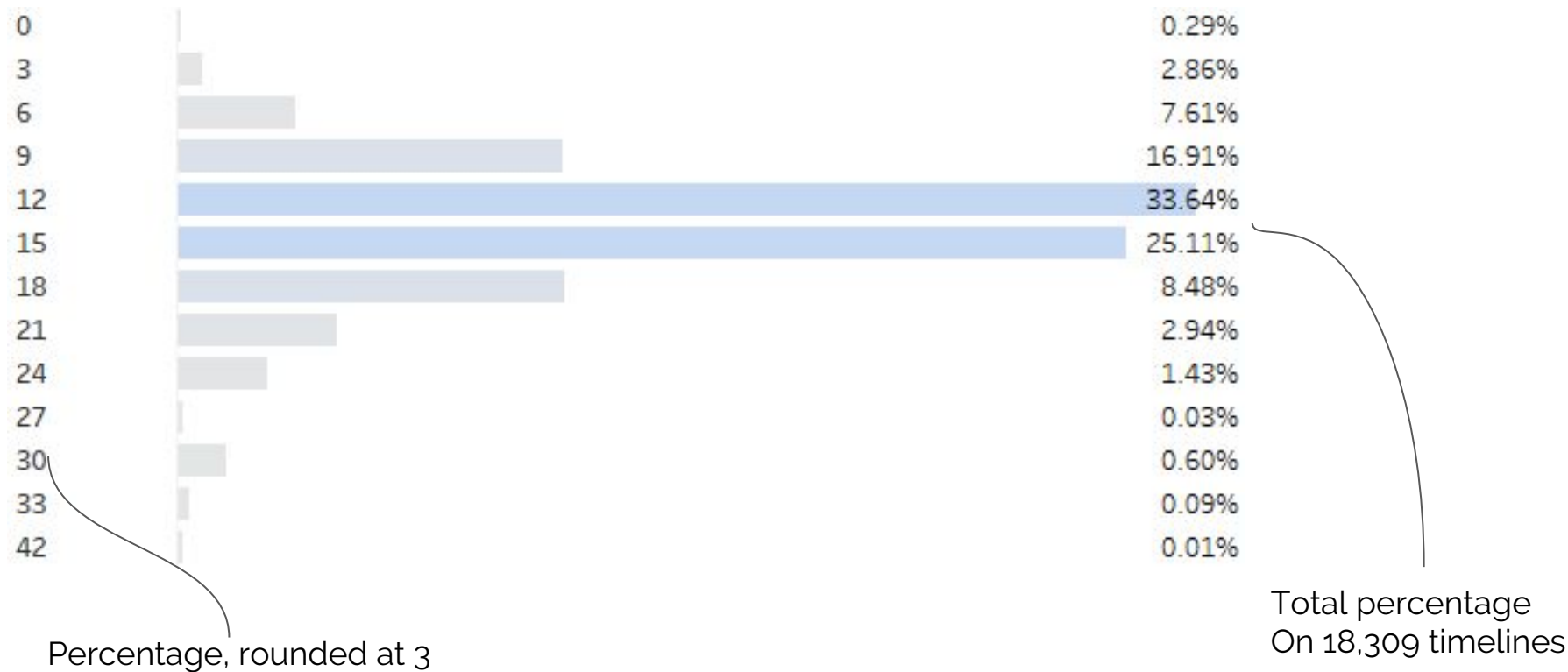
Considering only timelines with > 5 impressions

Percentage of advertising per timeline, March 2018



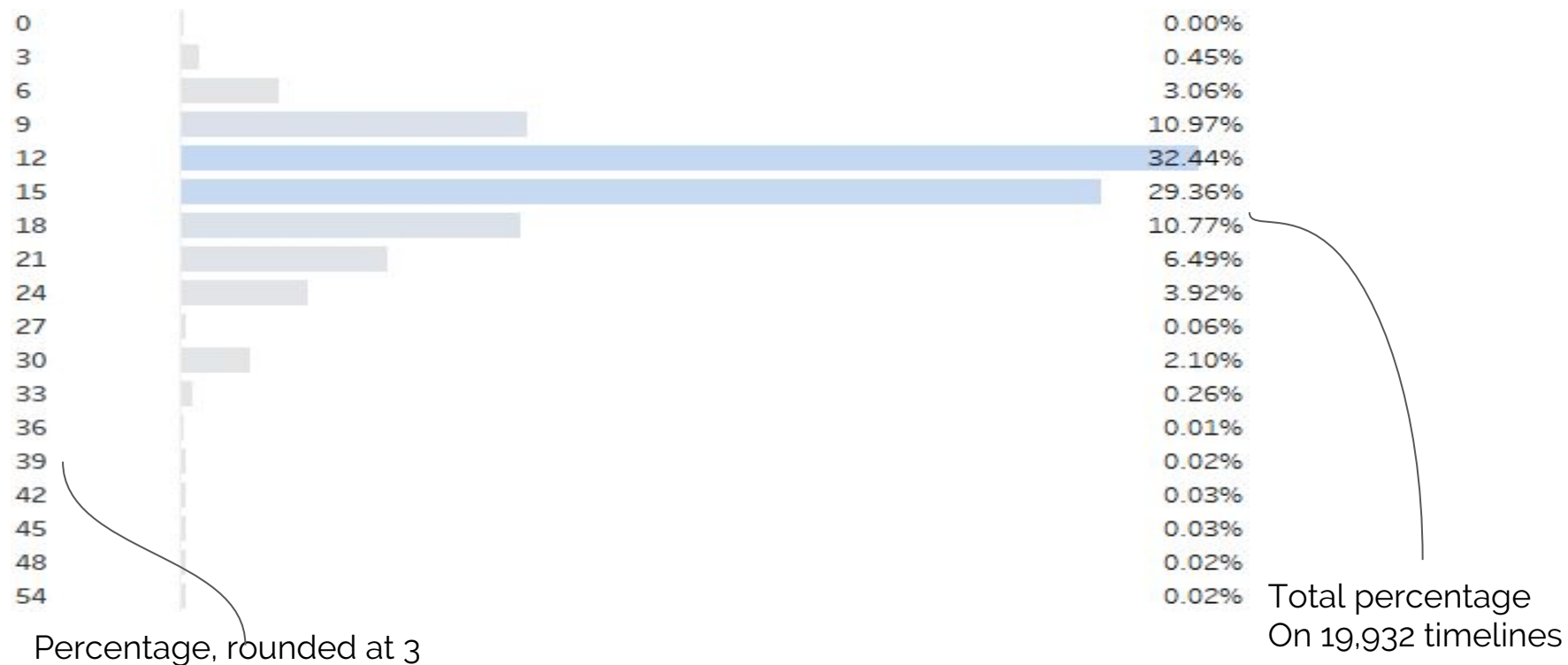
Considering only timelines with > 5 impressions

Percentage of advertising per timeline, April 2018



Considering only timelines with > 5 impressions

Percentage of advertising per timeline, May 2018



<https://github.com/tracking-exposed/facebook/blob/master/mongo-scripts/wolfie.js>

"We are committed to do our best for transparency in political advertising"

- Facebook since Russian interference investigation

October 2, 2017

Improving Enforcement and Transparency of Ads on Facebook

By Joel Kaplan, VP Global Public Policy

Last month we announced plans to share with Congress the ads that appear to be from a Russian entity known as the Internet Research Agency. We found more of these ads, which ran between 2015 and 2017. Many appear to amplify racial

October 27, 2017

Update on Our Advertising Transparency and Authenticity Efforts

by Rob Goldman, VP of Ads

When it comes to advertising on Facebook, people should be able to tell who the advertiser is and see the ads they're running, especially for political ads.

April 6, 2018

Making Ads and Pages More Transparent

By Rob Goldman, VP, Ads and Alex Himel, VP, Local & Pages

We believe that when you visit a Page or see an ad on Facebook it should be clear who it's coming from. We also think it's important for people to be able to see the other ads a Page is running, even if they're not directed at you. That's why today we're announcing

October 16, 2018

Increasing Transparency for Ads Related to Politics in the UK



Jake Creps
@jakecreps



To everyone wondering what the future is for #OSINT on Facebook, look what I just found. It looks like Facebook has some plans for us.



Manager, Anti-Scraping Facebook

📍 Menlo Park, CA, US

Posted 14 days ago · 81 views

Save

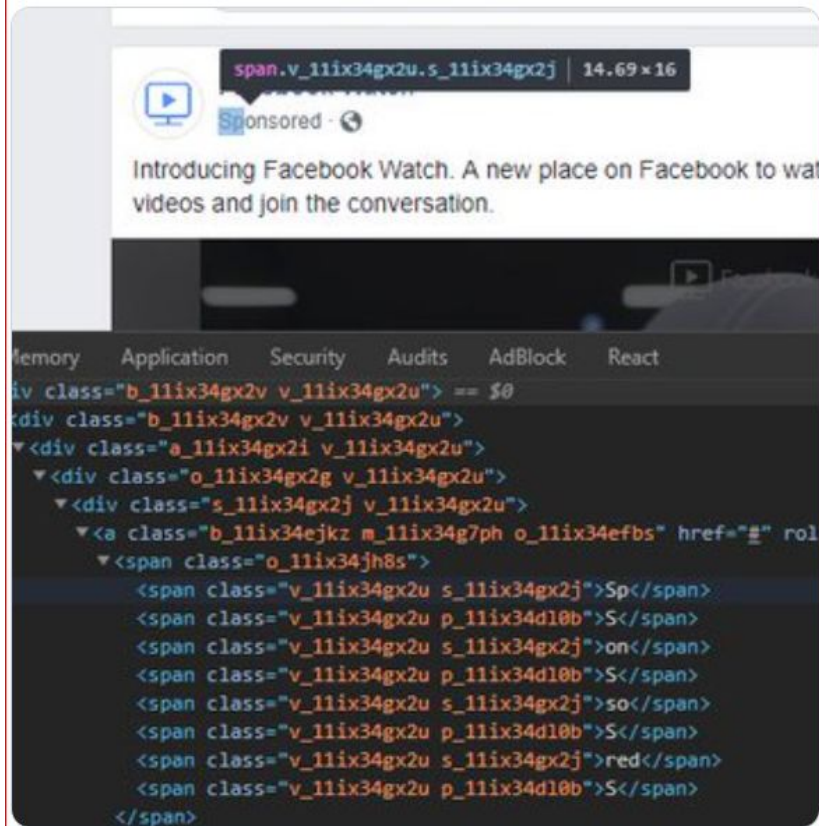
Apply



Aaron Rieke
@aaronkrbr

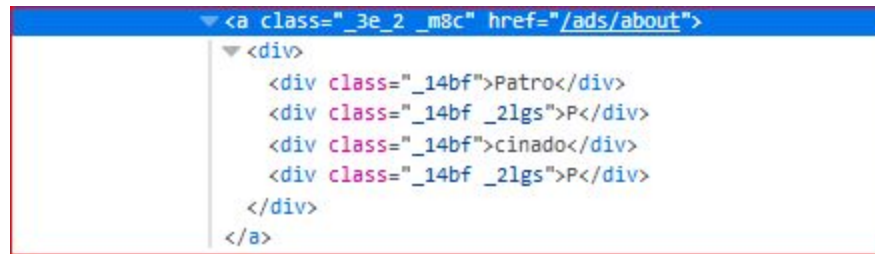


markup horrors of the ad blocker wars



worse than it looks like

- The string is hard to match but not so hard
 - (since > 1 year)

A screenshot of a web browser's developer tools showing the DOM tree. A link element is expanded, revealing a nested structure of divs. The link's href is "/ads/about". The nested divs contain the text "Patro", "P", "cinado", and "P" in sequence, which is a common pattern for sponsored content on some platforms.

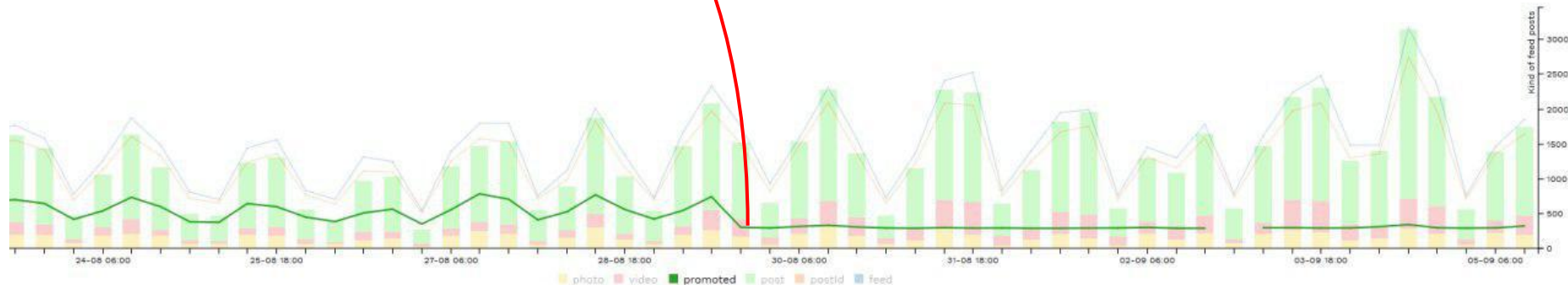
```
<a class="_3e_2 _m8c" href="/ads/about">  
  <div>  
    <div class="_14bf">Patro</div>  
    <div class="_14bf _2lgs">P</div>  
    <div class="_14bf">cinado</div>  
    <div class="_14bf _2lgs">P</div>  
  </div>  
</a>
```

- But now **every post** contains it as deception, to hide the truly *Sponsored* posts

This is what a **bad morning** looks like

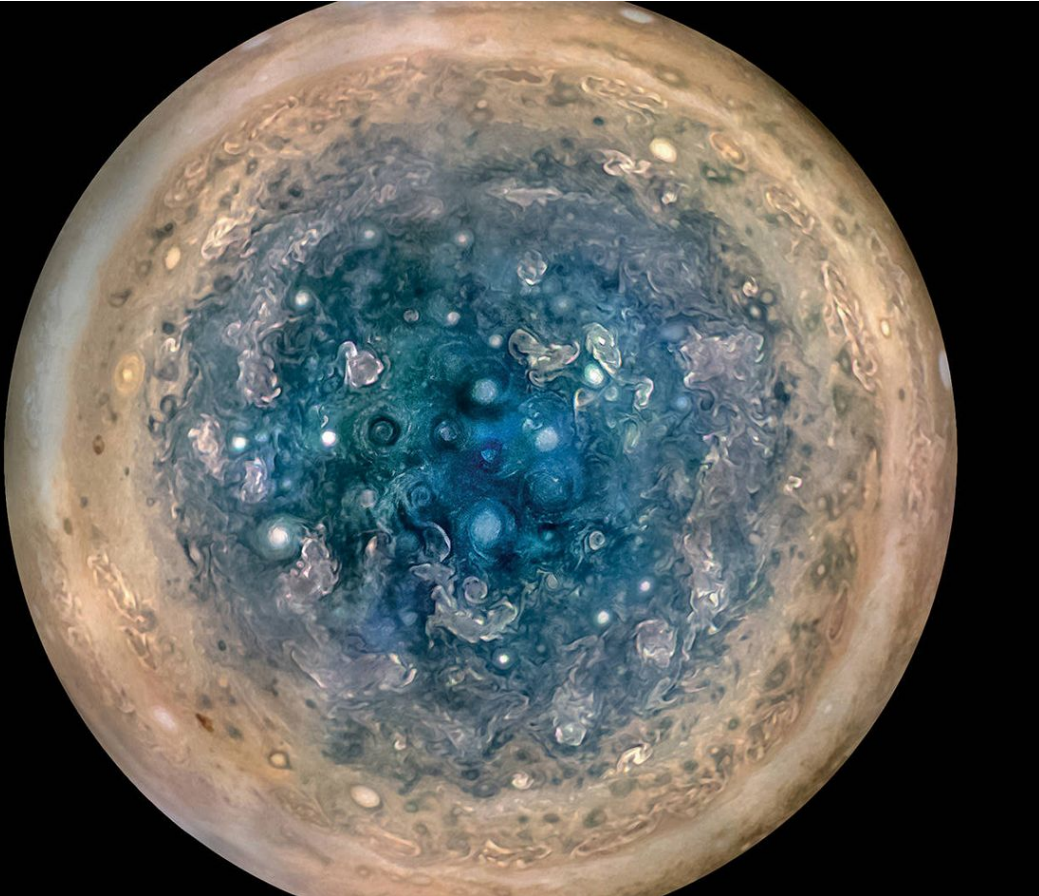
Metadata available

The analysis is made by the parser, try to see how they works



<https://facebook.tracking.exposed/stats>

corner case for free software



- web-extension: GPL
- backend: AGPL
- RSS service: GPL
- parser pipeline: ???

Algorithms might take the
shape of another
form of oppression

Sorry! we will have hard time ahead

Elections Canada will use AI to fight disinformation on social media

By [Charlie Pinkerton](#). Published on Nov 2, 2018 3:51am

4,091 views | Jul 18, 2018, 01:22am

This Google-Funded Company Uses Artificial Intelligence To Fight Against Fake News

In the fight against fake news, artificial intelligence is waging a battle it cannot win

By [Dave Gershgorn](#) • November 22, 2016

Artificial intelligence as tool to fight fake news, social bots in Brazil's elections

by [JESSICA CRUZ](#) • Jun 11 in [MISCELLANEOUS](#)

Facebook just bought an AI startup to help it fight fake news



by [MATTHEW HUGHES](#) — 5 months ago in [ARTIFICIAL INTELLIGENCE](#)

Using AI to Fight Disinformation in European Elections

WEDNESDAY, FEBRUARY 20, 2019 - 9:00 AM TO 10:30 AM CET

algorithm diversity

Fully empowered
Connected citizens

Anti-vaxxer, conspiracy
theory, polarization

Platform's algorithm hegemony

Imposed obscure
non-accountable
values

Some kind of content
verification

Critical thinking

We consider critical thinking the most important element of an healthy relationship with technology.

It pushes us to search for answers and allows us to question the world around us, instead of just accepting the status quo.

Simple, *stateless*, tools

**For algorithmically literate
people**

An opportunity ahead, May 2019



<https://github.com/tracking-exposed/presentation/blob/master/European%20Election%20action%20plan%20-%20v1.3.pdf>

The greatest gift to facebook...

- Politicians prefer social media because they *believe to be* disintermediated
 - They contribute to make SM more valuable
 - And potentially for the platform to exert more influence

Special answer for **EU2019**

- <https://facebook.tracking.exposed/feeds>
 - Unstable, and still an incomplete concept
 - the simplest **selection criteria**





ambitious plans ahead



activists, social
media campaigner

[facebook.tracking.exposed](#)
[tracking.exposed](#)

UX designer

Business developer,
Project officer

[youtube.tracking.exposed](#)

(not even an α)

Nodejs or python
programmers

Lawyers

Web-extension
programmer

Fundraisers

mobile?
missing, not by choice

Data scientists

2018 was good thanks to

Alberto Granzotto, Arikia Millikan, Barbara
Gianessi, Beatrice Cavicchioli, Costantino
Carugno, Cristina Kiki, Diego Candido, Federico
Sarchi, Giovanni Civardi, Giulia Q., Raffaele
Angus, Riccardo Coluccini, Sophia Carleson,
Stefania Milan.



references



- Eduardo Hargreaves, Claudio Agosti, Daniel Menasche, Giovanni Neglia, Alexandre Reiffers-Masson, and Eitan Altman. [Fairness in online social network timelines: Measurements, models and mechanism design. *Performance Evaluation*](#) (2018). DOI:10.1016/j.peva.2018.09.009 ([arXiv](#))
- Eduardo Hargreaves, Claudio Agosti, Daniel Menasche, Giovanni Neglia, Alexandre Reiffers-Masson, and Eitan Altman; [Biases in the Facebook News Feed: a Case Study on the Italian Elections](#), Fosint-SI 2018, in conjunction with ASONAM 2018, Proceedings of the 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining ([ASONAM](#)) DOI:10.1109/ASONAM.2018.8508659
- Eduardo Hargreaves, Daniel Sadoc Menasché, Giovanni Neglia, and Claudio Agosti, [Visibilidade no Facebook: Modelos, Medições e Implicações, in: Proceedings of the Brazilian Workshop on Social Network Analysis and Mining \(BraSNAM\)](#). Natal, Rio Grande do Norte, Brasil. Julho, 2018 ([file](#))
- TacticalTech publish a report written by Claudio Agosti and Fabio Chiusi, on [Italian political election and digital propaganda](#). fbTREX data, released in [this repository](#), have been used in a portion of the report.
- WebFoundation released a report produced by a joint collaboration (Argentina, in English and Spanish): [The invisible curation of content](#).
- Our repositories: <http://github.com/tracking-exposed/>
- English coordination chat: <https://chat.securitywithoutborders.org/community/channels/trackingexposed>
- Telegram channel for status updates: <https://t.me/fbTREXupdates>
- [we have to kill our medium account and be self-hosted, but until then]: <https://medium.com/@trackingexposed>

Manifesto <https://tracking.exposed>