

# Analisi dell'algoritmo difficoltà e possibilità

<https://facebook.tracking.exposed>  
Claudio Agosti, e-privacy

 @\_vecna

In the information age  
You are what you know  
(or what you are **exposed** to?)

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It is a bit like saying  
**Check your diet**, because  
you are what you eat



DAIRY (1-2 servings a day) OR  
VITAMIN D/CALCIUM SUPPLEMENTS



NUTS, SEEDS, BEANS & TOFU



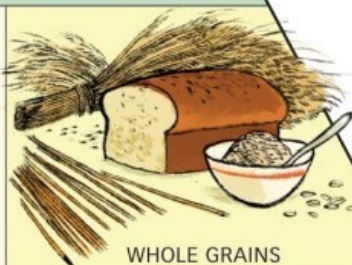
FISH, POULTRY & EGGS



VEGETABLES & FRUITS



HEALTHY FATS/OILS



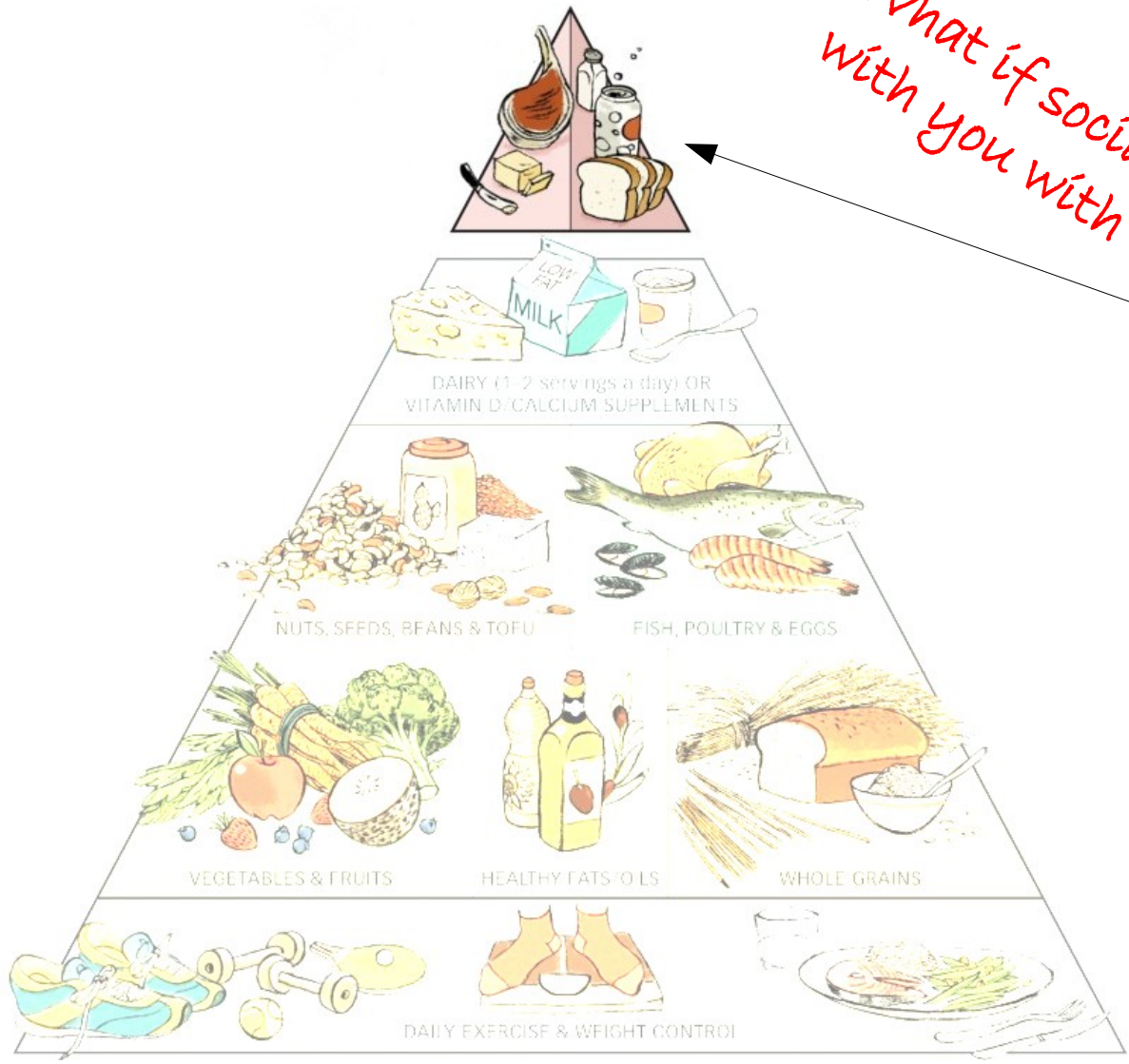
WHOLE GRAINS



DAILY EXERCISE & WEIGHT CONTROL



What if social media feeds  
with you with ONLY CANDY?





We address  
**Facebook** because  
is the biggest actor  
in the field

*But you should apply the same thought to any platform  
which uses the algorithm to personalize experiences*

# 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](#)

## What Happens to #Ferguson Affects Ferguson:

### Net Neutrality, Algorithmic Filtering and Ferguson

# FB algorithm is a conflict space



**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

12,522 Retweets 16,532 Likes



431 13K 17K



**Caryn Vainio** @Hellchick · 18 Dec 2017

A friend I've known mostly online for 15+ years died this weekend. Our friendship started on an old gaming forum, but continued on Facebook.

9 173 1.6K



Claudio Almir

Feed de Notícias

Messenger

Marketplace

Atalhos

Artificial Intelligenc... 20+

Tecnologia da Infor... 20+

Explorar

Páginas

Grupos

Eventos

Listas de amigos

Lembranças

Feed de Páginas 20+

Encontrar amigos

Jogos

Fotos

🔴 LIVE Vídeo ao vivo

Ver mais...

Criar

Anúncio · Página · Grupo

Evento · Campanha de arrecadação de fundos

✍ Criar publicação | 📁 Álbum de fotos/vídeos | 📺 Vídeo ao vivo



No que você está pensando, Claudio?

Foto/vídeo

😊 Sentimento/atividade

⋮

🔒 This post will be kept private

🌈 Your data



Stories

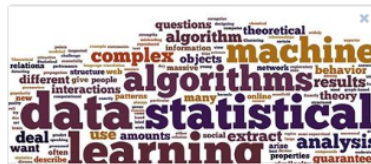


Adicionar ao seu story

Compartilhe uma foto, vídeo ou escreva algo

Grupos sugeridos

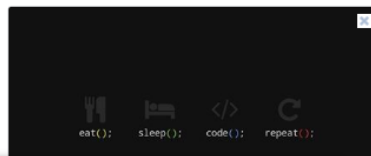
ver tudo



Deep Learning & A.I

2.325 membros

+ Participar



## Yay!! Welcome to facebook.tracking.exposed!

To let FbTREX work, you should opt-in in the forms of data-reuse you want us to enable. A more extensive explanation can be found at the page [privacy statement](#)

Give us the right to process a copy of your Facebook timeline (public data only).

The data you provide, could be reused, anonymized and not linked to any of your activity, to collectively understand the society connected to Facebook and how the algorithm has influence. All the tests are [documented and transparent](#)

Join the collective analysis of social network phenomena, please note: people are protected, you, and anyone else

[Close and Continue](#) →

(You should opt-in at least at the first button to get rid of this box)

public figures,  
media, high  
visibility pages

others (individual)

Public posts

Collected  
& shared

Collected

Friends-only posts

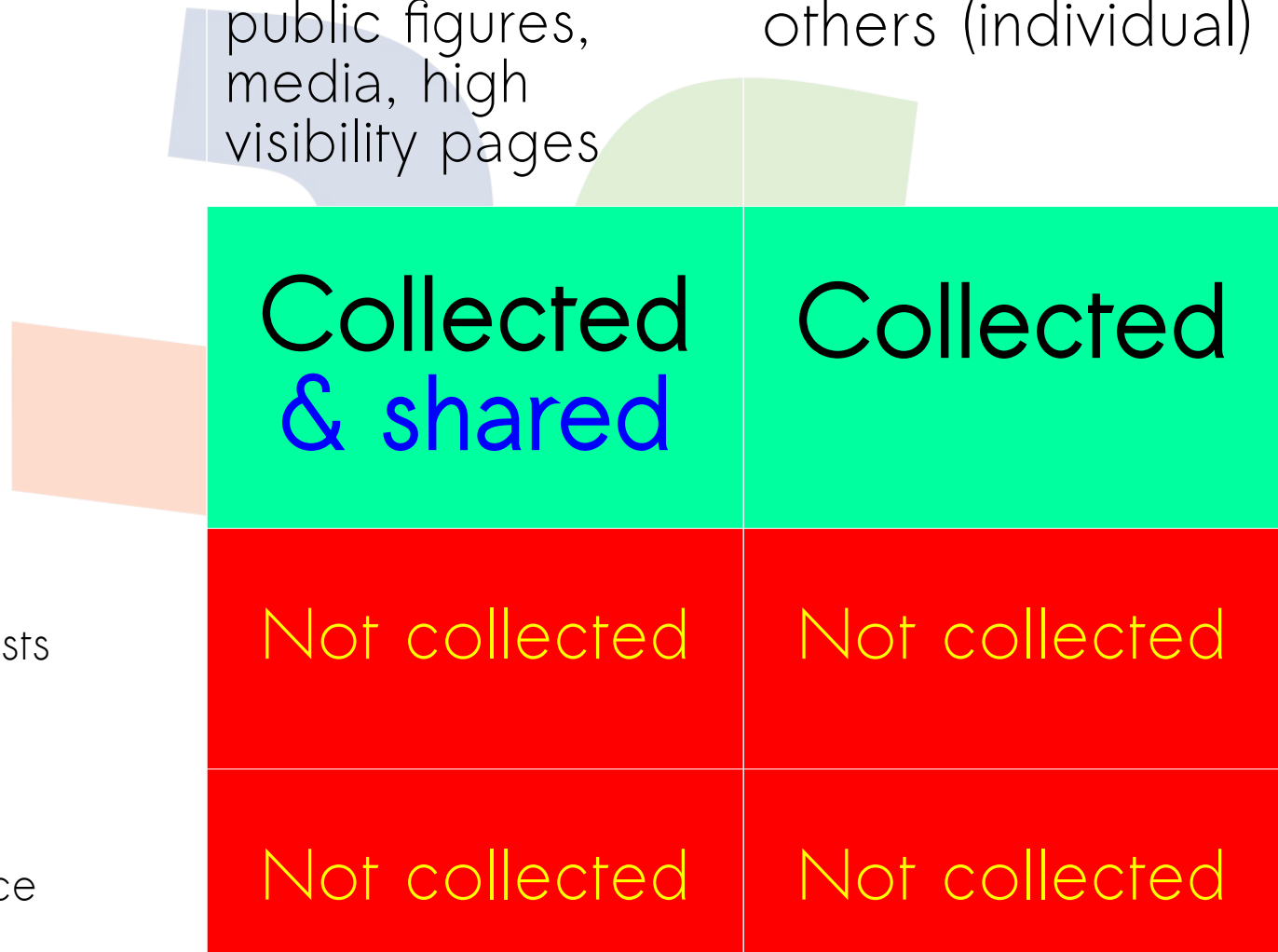
Not collected

Not collected

Custom audience

Not collected

Not collected





# Evidence are posts + advertising

Robin Kohn

Write on your mind. Cloud? 

PhotoMix TaskActivity



We're here to help keep your account safe

Quick: keeping your information safe is important to us. And like you, we want to know the you can choose to opt into our advanced tools so you have access to your account. We can help you here.

Learn More

Inspire You May Know

Relevant Suggestions



Tasay Dufre

Raylan Algar Bunkard

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Mays Warran

See Ted D'Elia



Something is wrong on the internet – James Bridle – Medium

By James Bridle The writer and entrepreneur with technology and culture usually with an open bag but rarely containing...

Like Comment Share

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Amika Mishkin



CIFAR  
CIVIL FORUM FOR ASSET RECOVERY

Investigate the Mediterranean - CIFAR

Are you living north of the Atlantic and looking for a way to fight corruption? Apply to our next asset recovery program.

Like Comment Share

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Facebook

Share your photos, videos, and more with friends and family.

Like Comment Share

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Levi Sophie Dombrink

Like Comment Share

Write a comment...


Write a comment...

Write a comment...

Write a comment...

Write a comment...

Shawn Abu Layla Conley



Every Last One of Us is a Chaos Muppet or an Order Muppet

Like Comment Share

Write a comment...


Write a comment...

Write a comment...

Write a comment...

Write a comment...

Robert Mueller's Brilliant Strategy for Outmaneuvering Trump Pardons



Like Comment Share

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Write a comment...

Subscribe for Fun and get a free notebook

Like Comment Share



The timelines are the product of four variables

- The user's profiles
- *The NewsFeed algorithm*
- What the users follow, (a.k.a. friends)
- How many posts they get (duration, frequency)

Our is black-box test, we should reduce these variables



# How to start?



We defined a scope, and pick 30 pages/political figures

# Methodology

Antonietta

Britta

Michele

Oliviero

Andrea

Santiago

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

We made six users



# Methodology

Antonietta

Britta

Michele

Oliviero

Andrea

Santiago

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

Follow the  
30 pages

*left*

*Movement  
5 Stars*

*far-right*

*Right*

*Center-Left*

made the profiles diverge,  
they *liked* different content and affiliated pages.

# Methodology

Month	Day	Hour	Profile Name / Profile Align					
			Andrea right	Antonietta left	Britta MSS	Michele far-right	Oliviero undecided	Santiago center-left
January	25	7	■ 39	■ 41	■ 42	■ 43	■ 42	■ 39
		8	■ 44	■ 42	■ 40	■ 39	■ 46	■ 47
		9	■ 44	■ 39	■ 40	■ 46	■ 46	■ 56
		10	■ 52	■ 48	■ 46	■ 40	■ 47	■ 47
		11	■ 52	■ 27	■ 52	■ 51	■ 41	■ 44
		12	■ 52	■ 43	■ 49	■ 46	■ 41	■ 56
		13	■ 42	■ 43	■ 50	■ 49	■ 44	■ 44
		14	■ 44	■ 46	■ 50	■ 49	■ 43	■ 49
		15	■ 47	■ 50	■ 53	■ 46	■ 41	■ 48
		16	■ 42	■ 45	■ 51	■ 45	■ 47	■ 45
		17	■ 47	■ 39	■ 46	■ 46	■ 43	■ 47
		18	■ 50	■ 43	■ 47	■ 52	■ 46	■ 51
		19	■ 44	■ 44	■ 46	■ 50	■ 38	■ 45

They were accessing at the same time, *auto-scrolling*

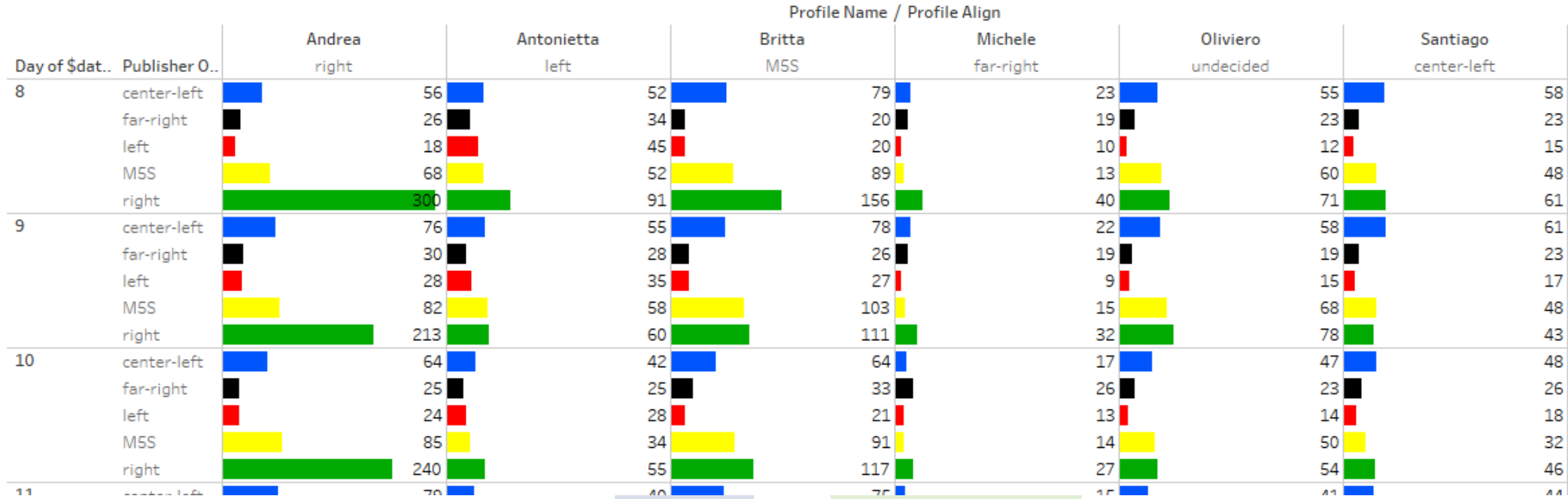


# Now we can run comparisons!

Month of \$..	Day of \$dat..	Utype	Profile Name / Profile Align					
			Andrea right	Antonietta left	Britta MSS	Michele far-right	Oliviero undecided	Santiago center-left
February	8	photo						
		post						
		video						
9		photo						
		post						
		video						
10		photo						
		post						
		video						
11		photo						
		post						
		video						
12		photo						
		post						
		video						
13		photo						
		post						
		video						
14		photo						
		post						
		video						

Size proportional to the amount of evidence collected

# filter bubble is not a simple concept



Size proportional the amount of **unique posts**

# How many posts have already been seen?

Observed	Profile Name / Profile Align					
	Andrea right	Antonietta left	Britta M5S	Michele far-right	Oliviero undecided	Santiago center-left
1	2,922	1,395	2,171	420	1,177	1,092
2	1,080	1,129	1,192	425	1,101	1,090
3	317	755	414	431	789	997
4	97	321	130	435	404	519
5	43	136	43	442	164	216
6	18	64	9	426	58	78
7	10	21	3	328	24	31
8	5	9		219	13	15
9	3	6		128	8	8
10	2	3		78	7	3
11	1	2		54	6	3
12	1	2		40	2	3
13	1	2		33	1	3
14		2		30	1	1
15		2		20	1	1
16		1		6		
17				2		
18				2		
19				1		
20				1		

# Investigate on specific event

Italy

## Attacks on immigrants highlight rise of fascist groups in Italy

Antifascists say authorities have no will to stop 'unconstitutional' far-right parties

**Lorenzo Tondo** in Palermo

@lorenzo\_tondo

Tue 6 Feb 2018 14.06 GMT

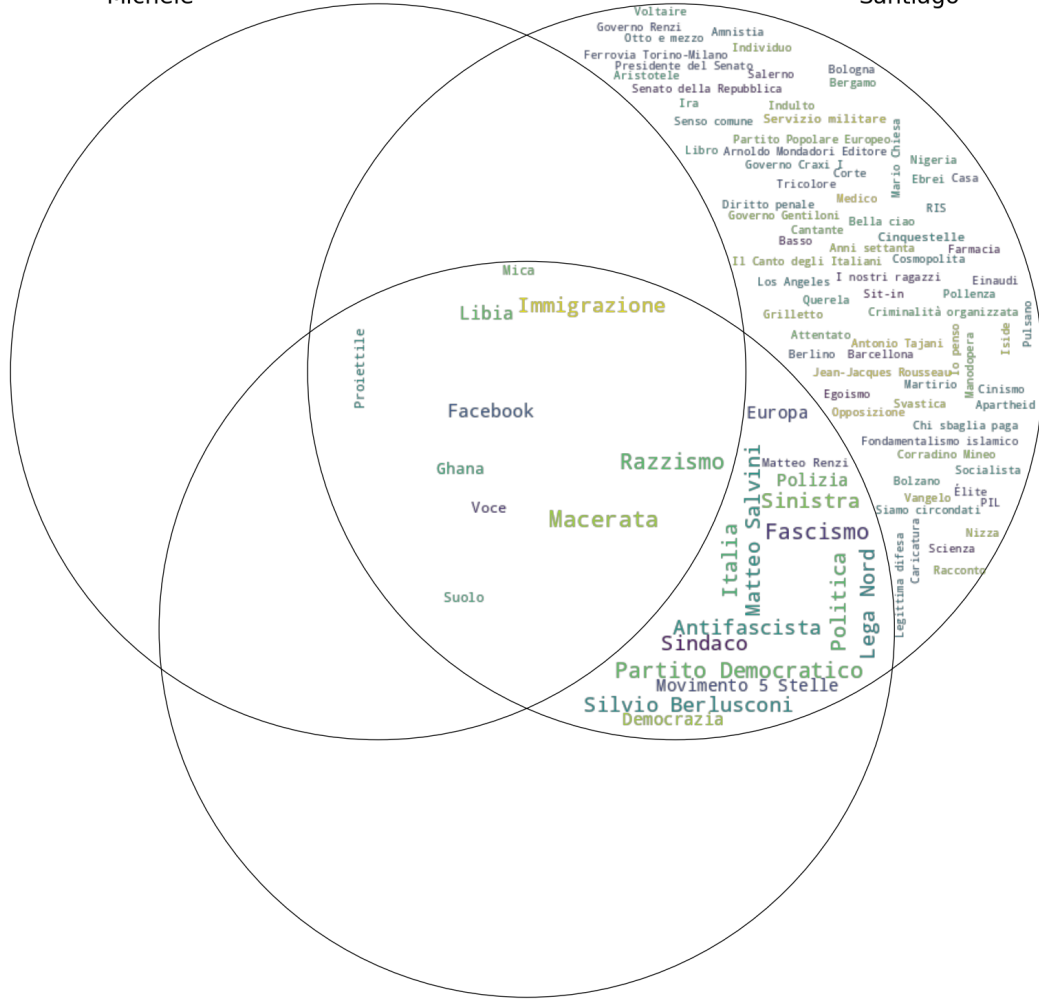


<  
21,253



Michele

Santiago



Antonietta



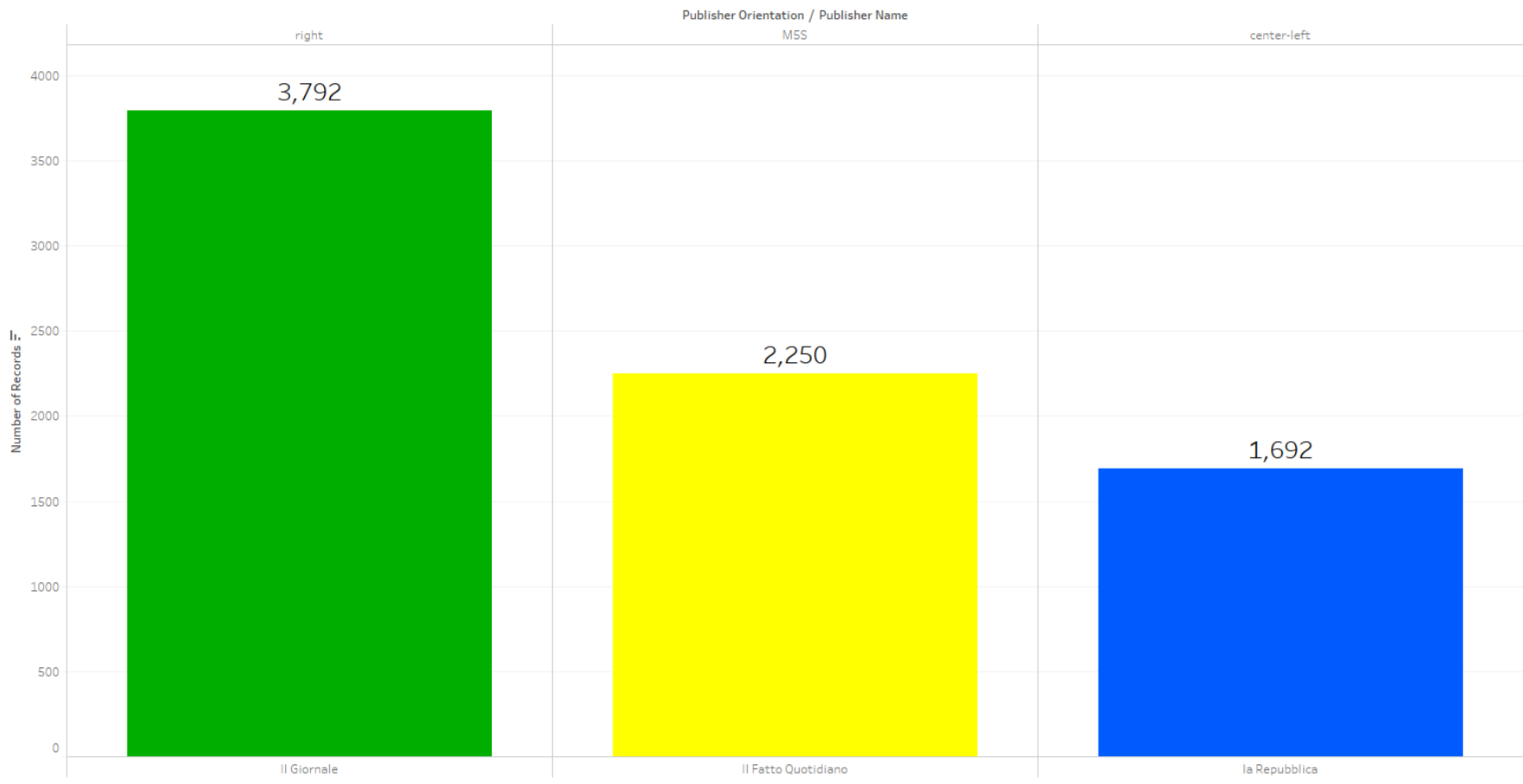
## **THE INVISIBLE CURATION OF CONTENT:**

Facebook's News Feed and our  
Information Diets

April 2018

# Using the API, we compared media productivity

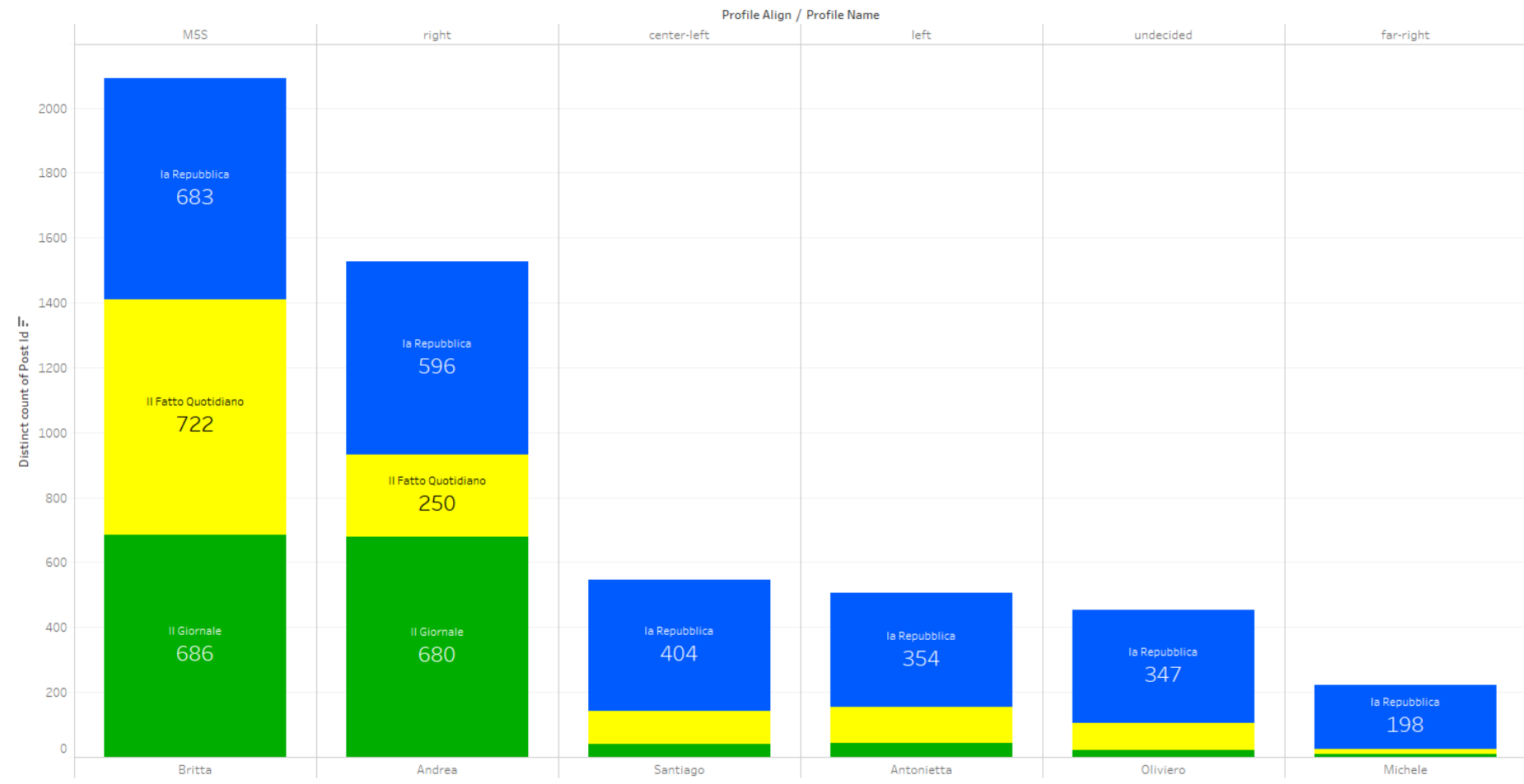
Published posts by three selected media





# How they have been treated on surfaced posts?

Surfaced posts by three selected media



Time to wrap up =)

<https://tracking.exposed> goal is to  
foster *algorithm diversity*

If algorithms decide your priorities,  
you **deserve to run** your own  
algorithm.

- Address misinformation [1,2]
  - Use different metrics than SM
  - Outrage on algorithms discrimination
  - Implement priorities of people/cultures *distant* from Palo Alto
- done. If the imaginary change, we won.**



# importanti & incombenti

- Data Protection Impact Assessment
- Elezioni Europee

# Aiuto necessario

Check the repositories

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

Fell something in common with this  
manifesto <https://tracking.exposed>