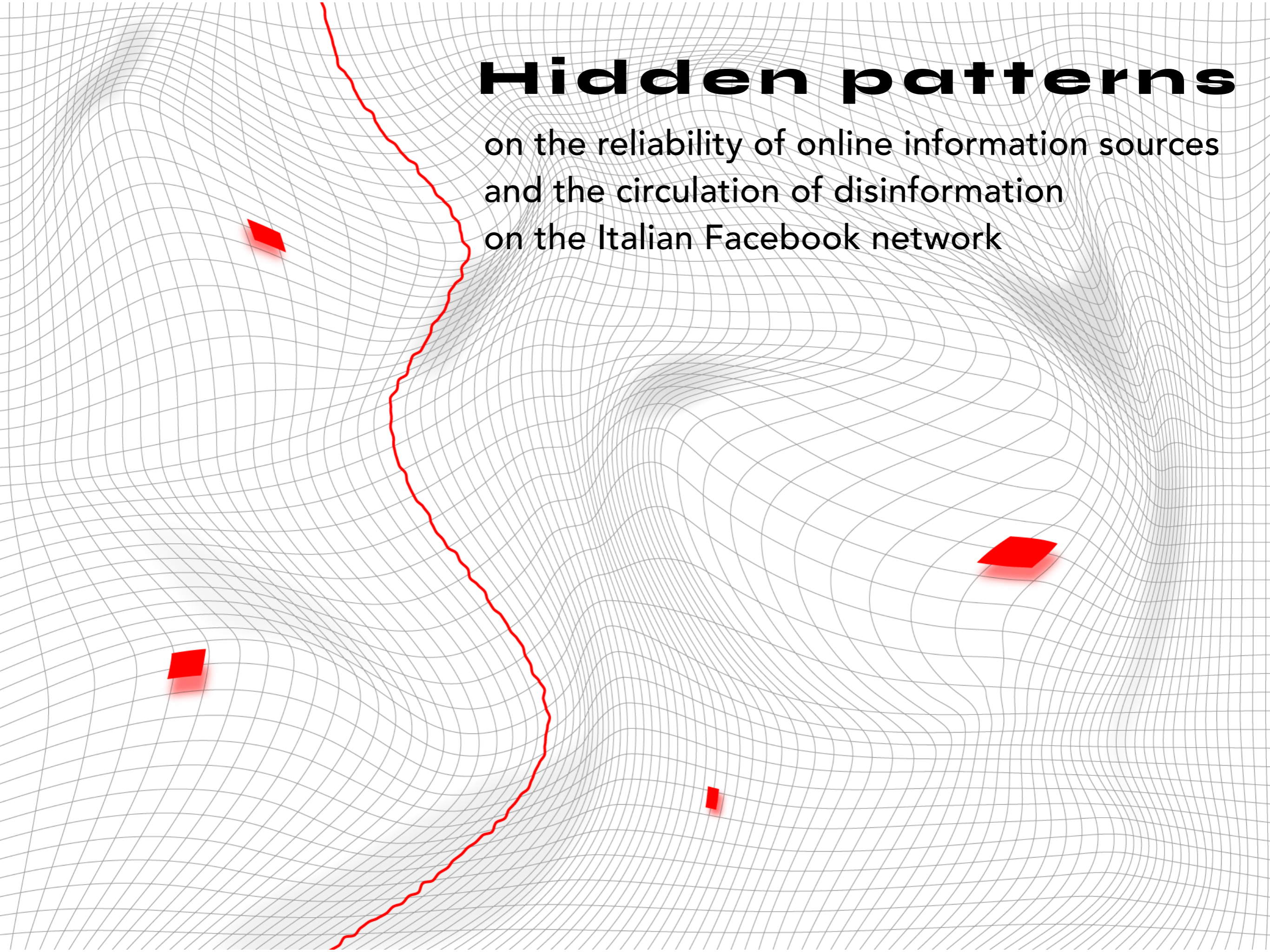# Hidden patterns

on the reliability of online information sources
and the circulation of disinformation
on the Italian Facebook network

👩‍🎓 **Elena Aversa**

MSc Communication Design
@ Politecnico di Milano

Information disorders

Digital transformation ⟶ Democratic networks

"Digital media generate a genuinely communicative relation that is, symmetrical communication. **The receiver of information is simultaneously its sender.** It is difficult to set up relations of power in symmetrical spaces of communication."

Byung-Chul Han, in the Swarm: Digital Prospects, 2016

status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats

Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network

status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats, posts, pictures, videos, articles, GIFs, status updates, tweets, emails, stories, chats

That's too much information!

Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network

"The situation when someone has so much information
that they are **unable to deal** with it."

Collins English Dictionary

"Infobesity" ←

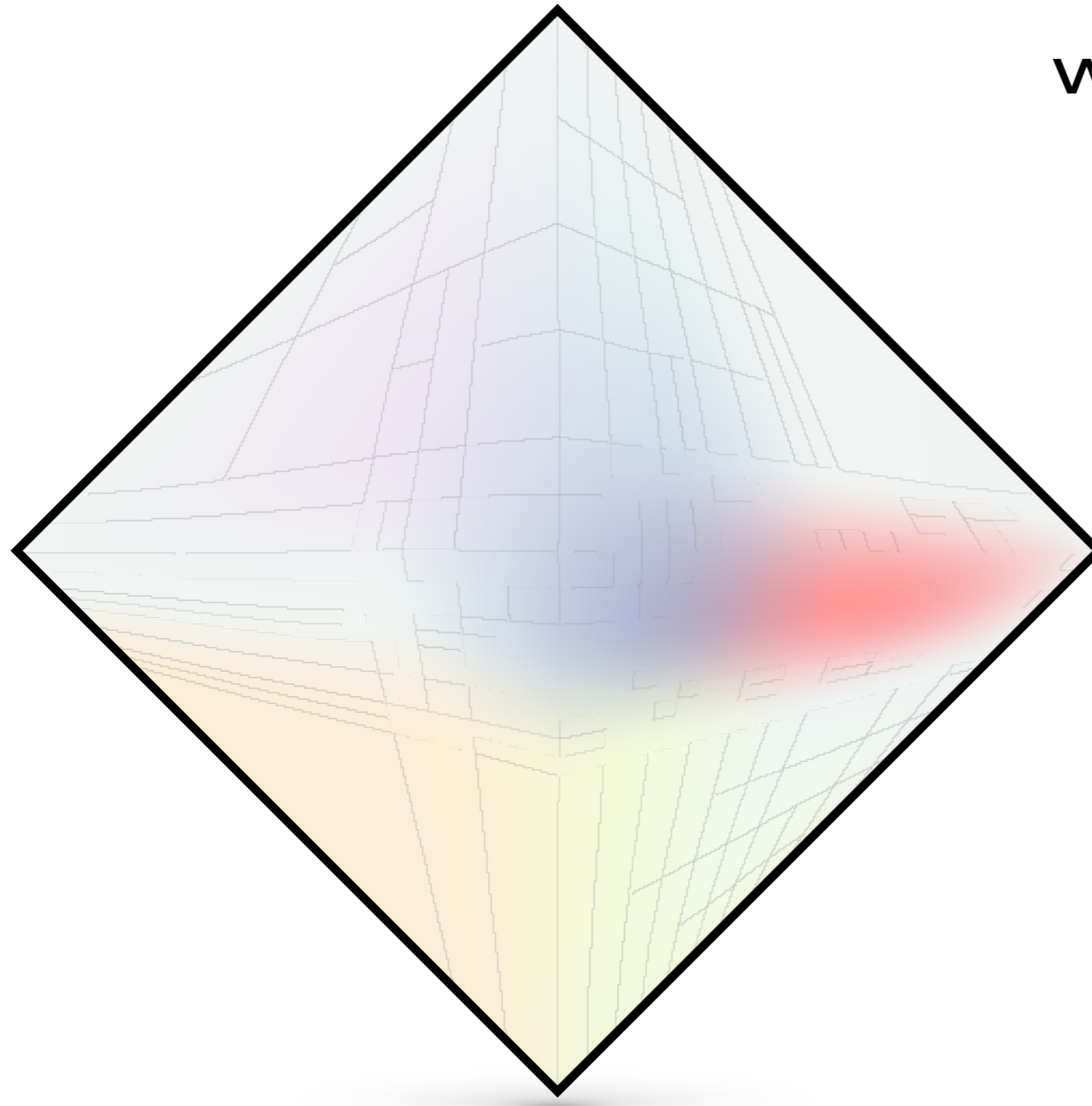Rogers P., Puryear R., Root J., 2013

"Infoxification" ←

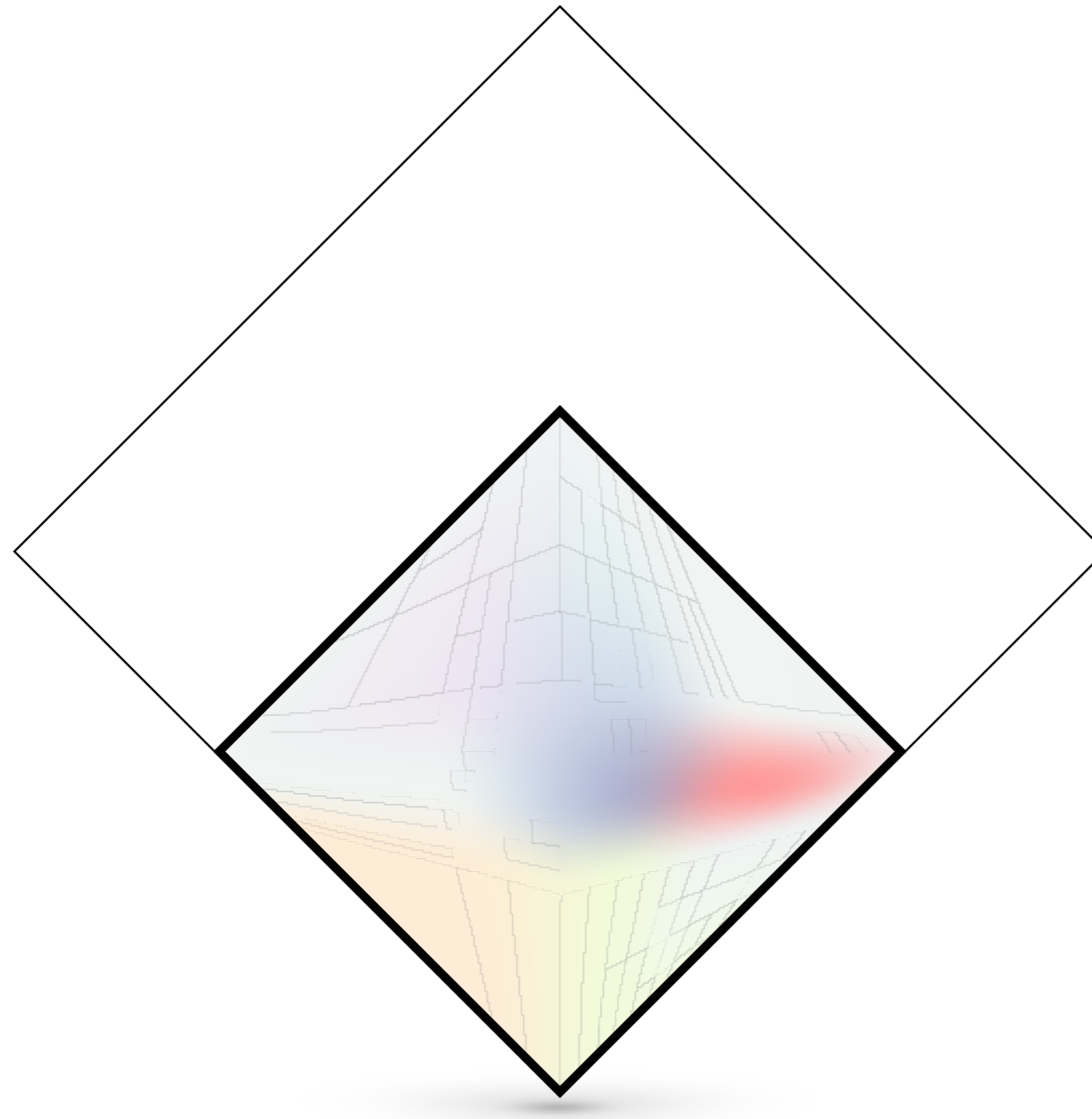Chamorro-Premuzic T., 2014

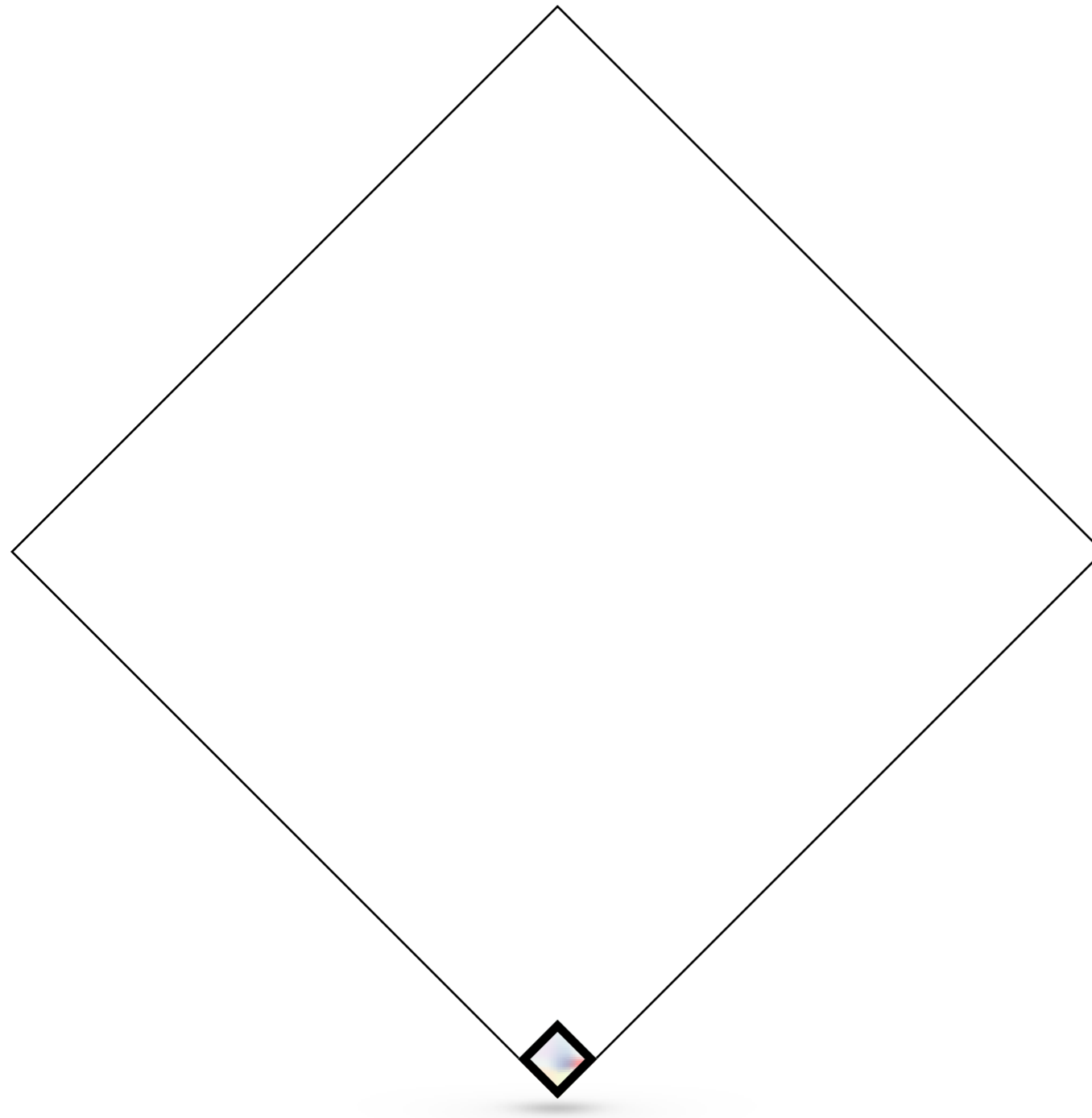"Information Anxiety" ←

Wurman R. S., 2012

World population
7.7 billion people

www.worldometers.info

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Social net users (worldwide)
3.48 billion people

Wearesocial & Hootsuite,
Digital in 2019

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Social net users (Italy)
35 million people

Wearesocial & Hootsuite,
Digital in 2019

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Facebook

"La decisione di rendere il proprio social network un ecosistema in grado di coprire e trecentosessanta gradi i bisogni dell'utente e alla base del successo di Facebook. In pratica, Facebook sta utilizzando nell'ambito del social network la stessa strategia utilizzata dai portali dell'era di Internet: diventare veri e propri **aggregatori di informazioni e servizi**."

Riva G., I Social Network, 2010

TYPES OF INFORMATION DISORDER

FALSENESS   INTENT TO HARM

Misinformation
Unintentional mistakes such as innaccurate photo captions, dates, statistics, translations, or when satire is taken seriously.

Disinformation
Fabricated or deliberately manipulated audio/visual content. Intentionally created conspiracy theories or rumours.

Malinformation
Deliberate publication of private information for personal or corporate rather than public interest, such as revenge porn. Deliberate change of context, date or time of genuine content.

FirstDraft News, 2017

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"False information **deliberately** and often covertly spread
(as by the planting of rumors) in order to **influence** public opinion
or obscure the truth"
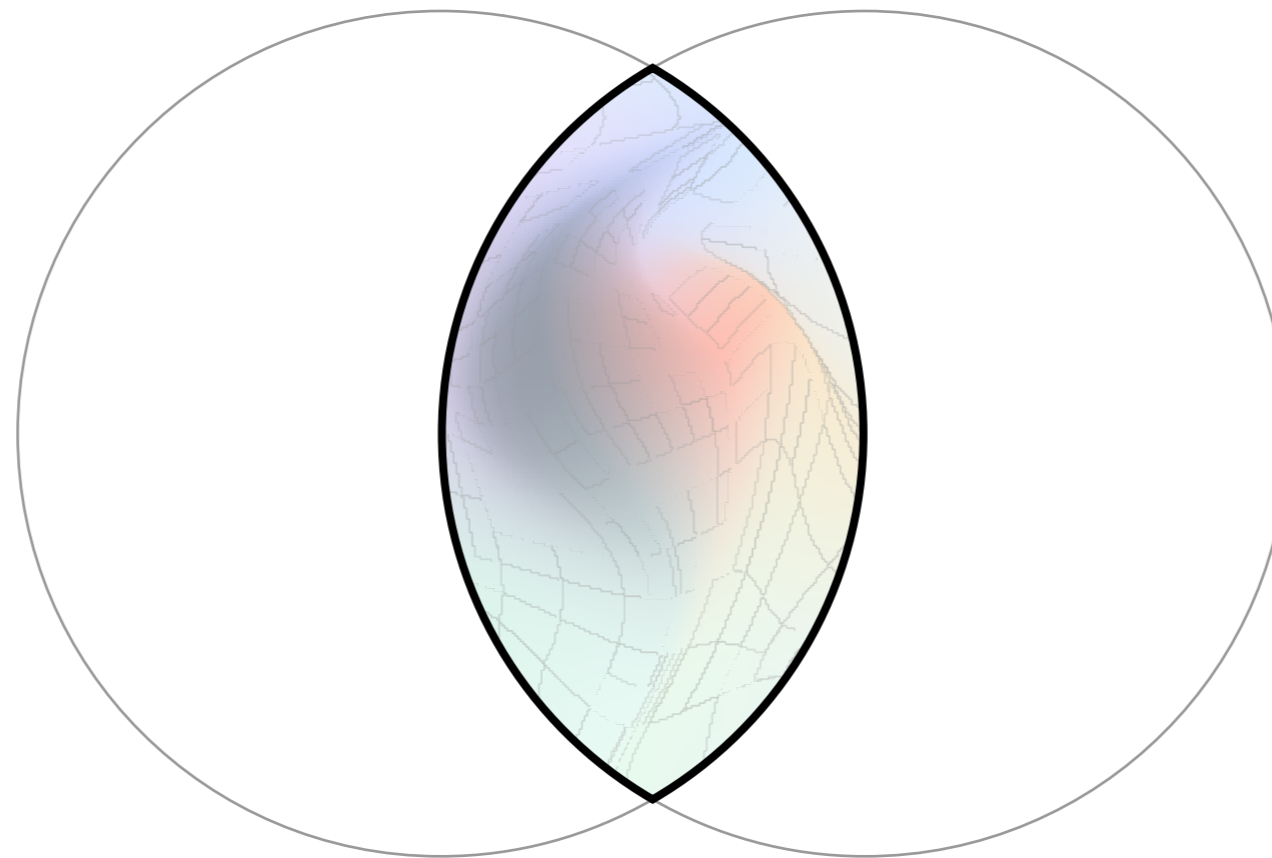
Meriam-Webster Dictionary
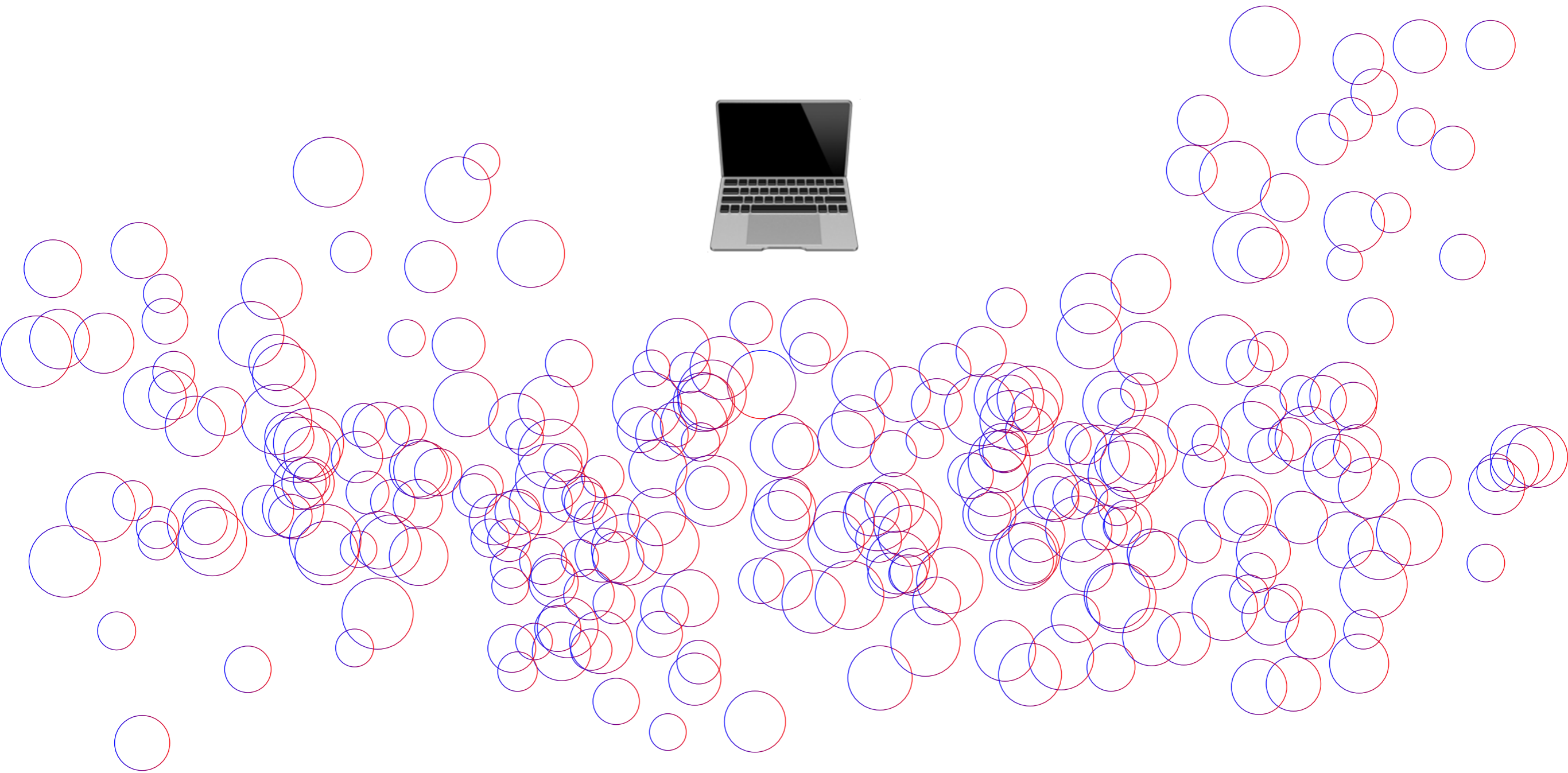
👴

Zinoviev Letter ←

Falsified letter published by the British Daily Mail newspaper.
It influenced the results of the general election in 1924

The Protocols of the Elders of Zion ←

Antisemitic fabricated text purporting to describe
a Jewish plan for global domination
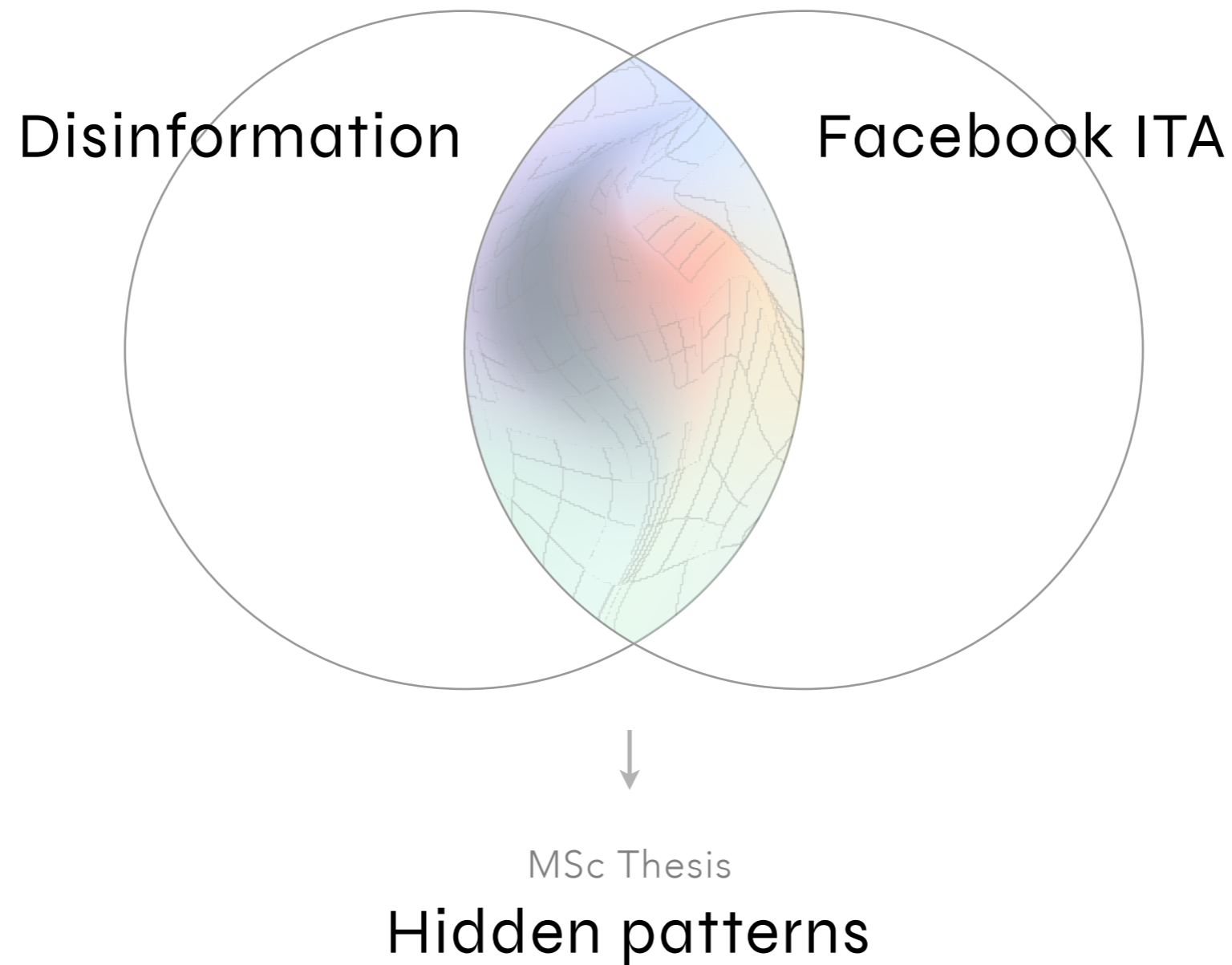
Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network

Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network

Social influence   +   Fact-check & debunk

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what can be said about the Italian situation?

Disinformation

Facebook ITA

MSc Thesis

Hidden patterns

Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network

01

Building the dataset

Which sources
are sharing disinformation
on the Italian Facebook?

02

Deepen the field

Do these sources share
a common pattern of
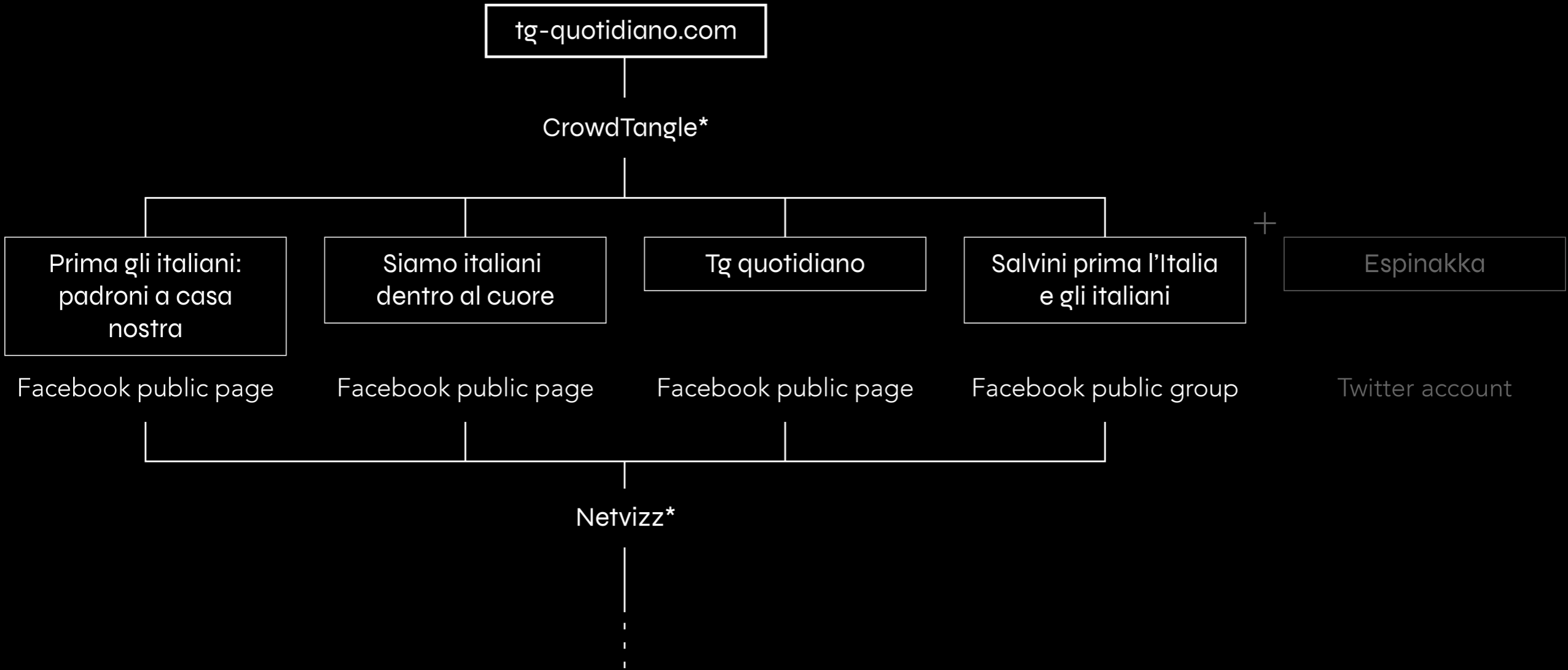relationships?
+
Do these relationships
influence Facebook
users?

03

Action/solution plan

How to make the users be
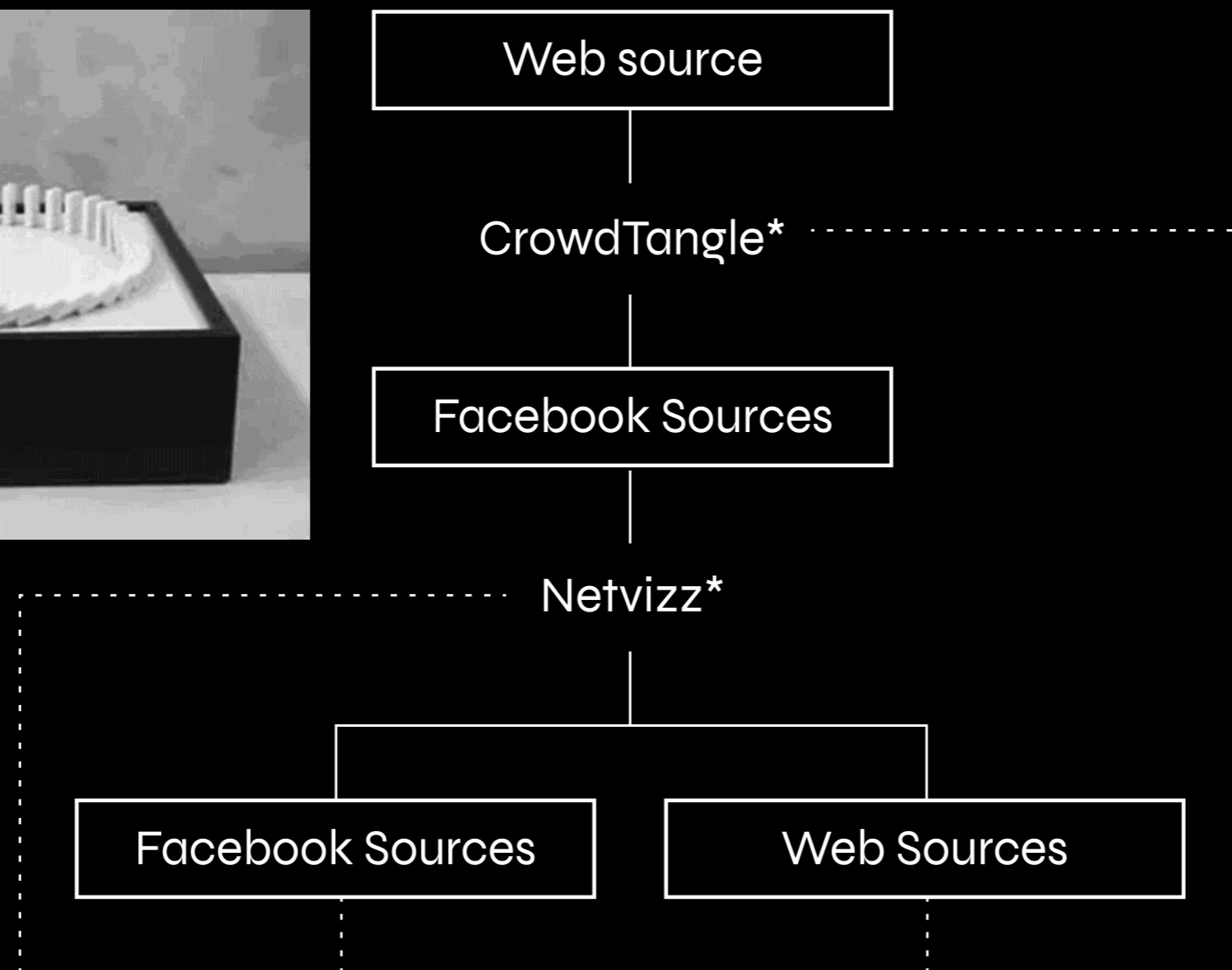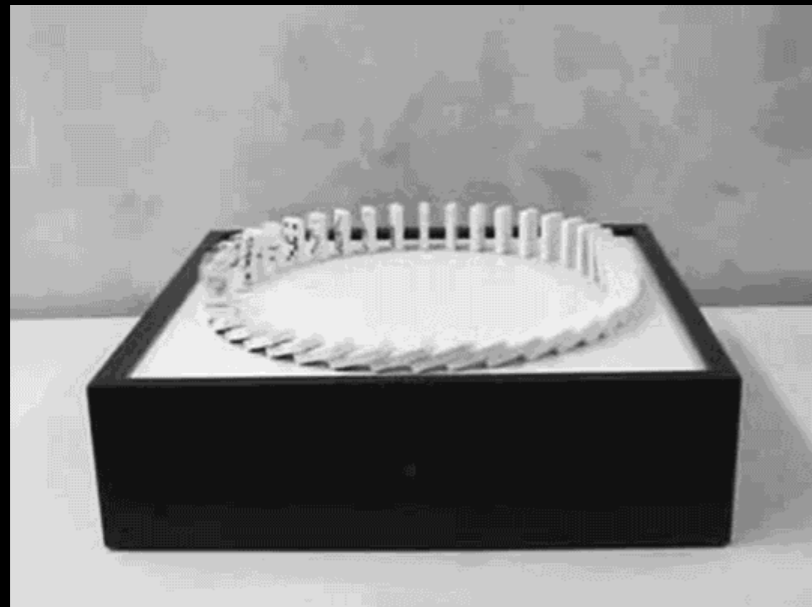critical to the information
they consume on Facebook?

👵🏾

Facebook News Feed

↓

Prima gli italiani: padroni a casa nostra

Italians first: masters of our house

↓

Tg Quotidiano

tg-quotidiano.com

Disinformation

tg-quotidiano.com

CrowdTangle*

Prima gli italiani: padroni a casa nostra

Siamo italiani dentro al cuore

Tg quotidiano

Salvini prima l'Italia e gli italiani

Espinakka

Facebook public page

Facebook public page

Facebook public page

Facebook public group

Twitter account

Netvizz*

```
┌─────────────────────┐
│     Web source      │
└─────────────────────┘
          │
      CrowdTangle* ┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┐
          │                              ┊
┌─────────────────────┐                  ┊
│  Facebook Sources   │                  ┊
└─────────────────────┘                  ┊
          │                              ┊
  ┄┄┄┄┄ Netvizz* ┄┄┄┄┄┐                  ┊
  ┊       │           ┊                  ┊
  ┊   ┌───┴───┐       ┊                  ┊
┌──────────────────┐  ┌──────────────────┐
│ Facebook Sources │  │   Web Sources    │
└──────────────────┘  └──────────────────┘
  ┊                      ┊                ┊
  └┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┘┄┄┄┄┄┄┄┄┄┄┄┄┄┄┄┘
```

255

Facebook sources

↓

8

Public pages

Prima gli Italiani: Padroni a Casa Nostra
Siamo Italiani Dentro al Cuore
Tg Quotidiano
Dimissioni e Tutti a Casa
Dimissioni Boldrini
Forconi
Avvistamenti di Creature Mitologiche
Aprite gli Occhi

228

External sources

Relationship patterns

2

Web source

Facebook page

Disinformation

1

Facebook page

Web source

Varied content

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Prima gli italiani: padroni a casa nostra

2

Web source

Facebook page
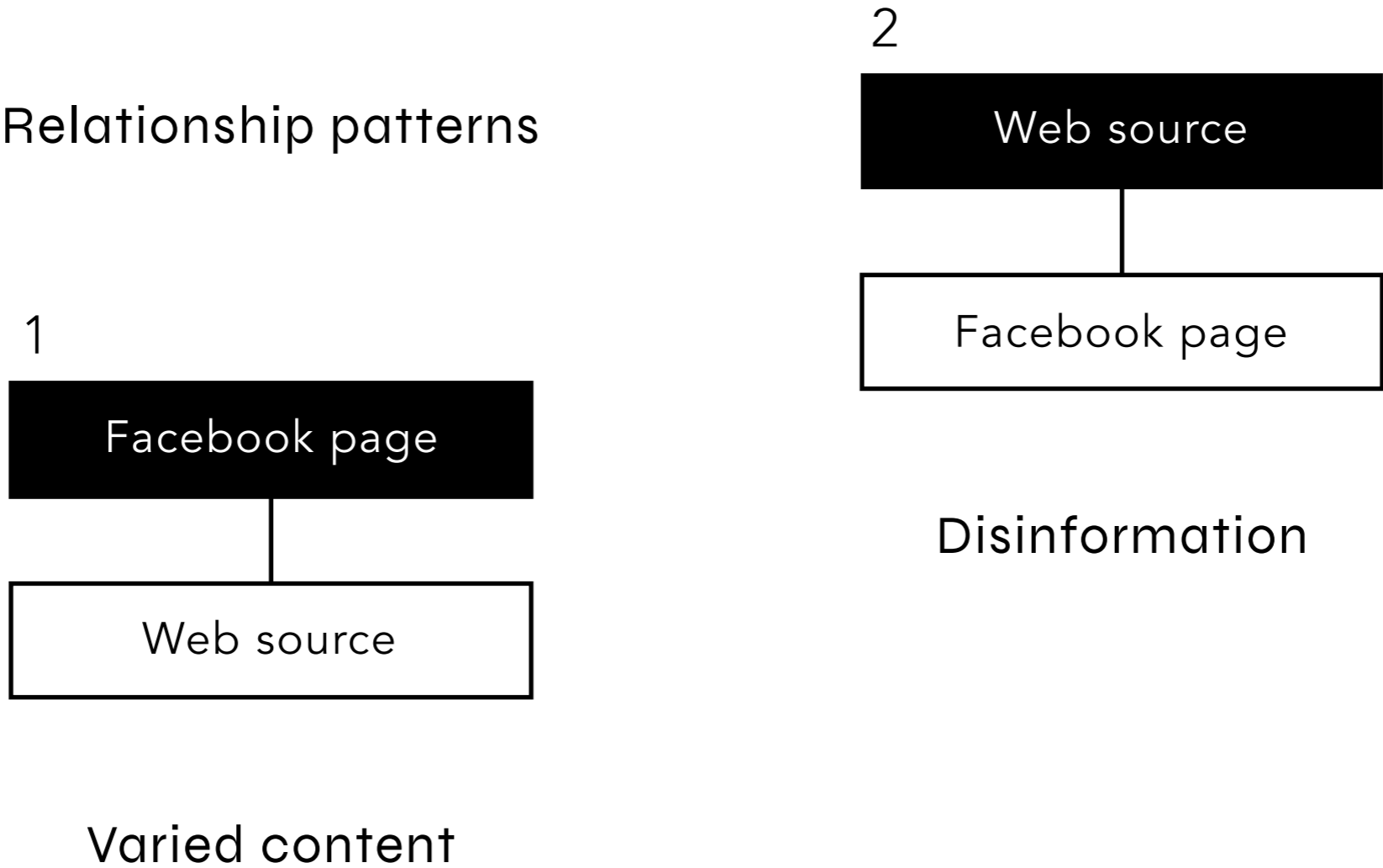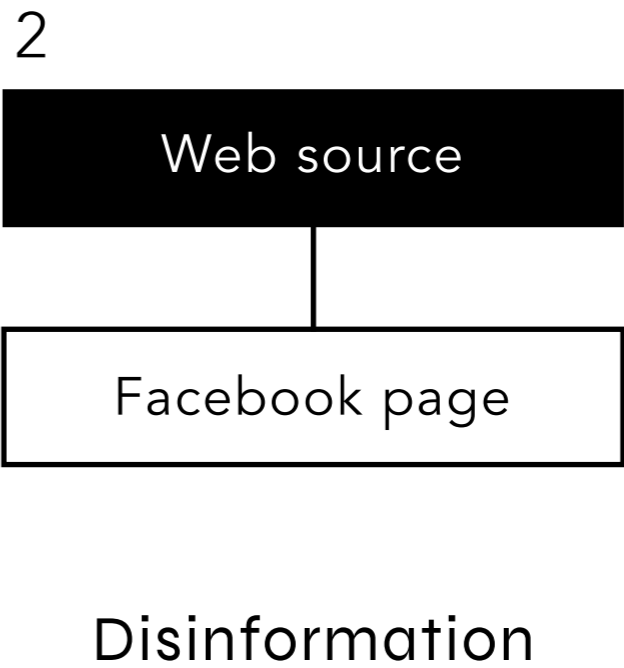
Disinformation

Before, during and after the 2018 Italian general elections

18 Feb 2018—30 Sept 2018

tg-quotidiano.net telegiornale.news tg-quotidiano.com

Links shared

18

10

0

19.6.18 18.7.18 2.9.18-3.9.18 30.9.18

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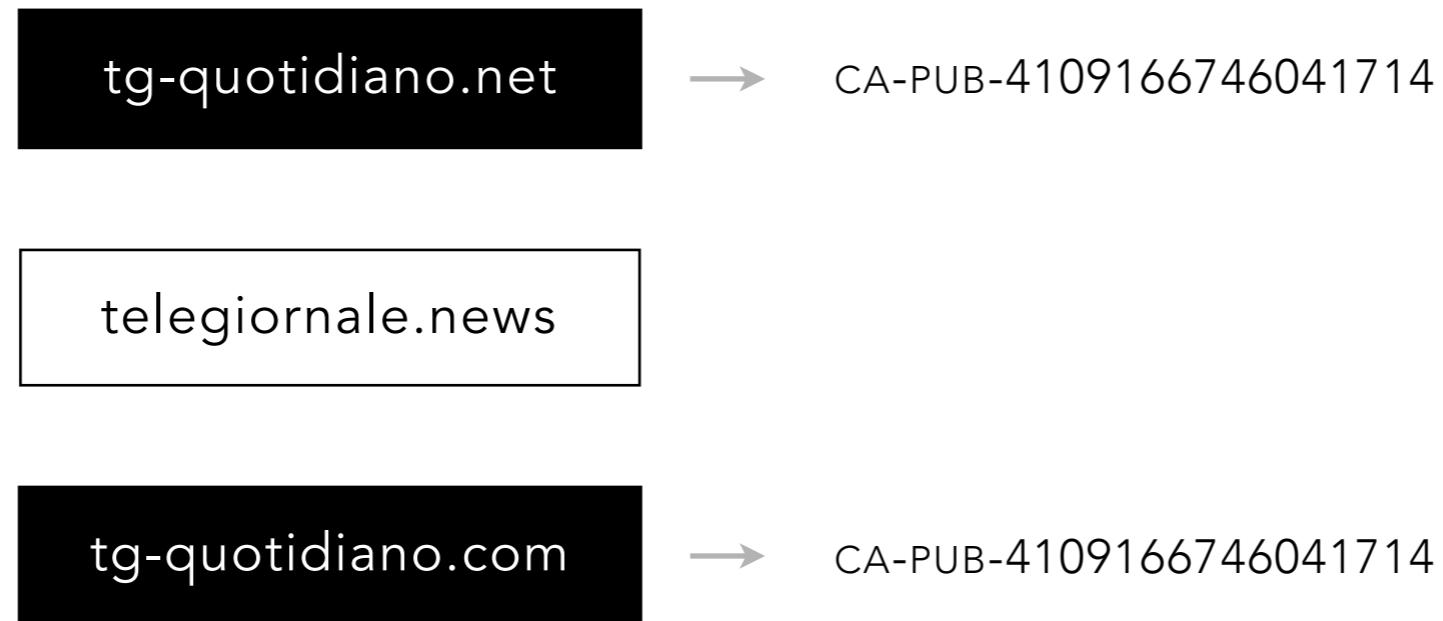
Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network
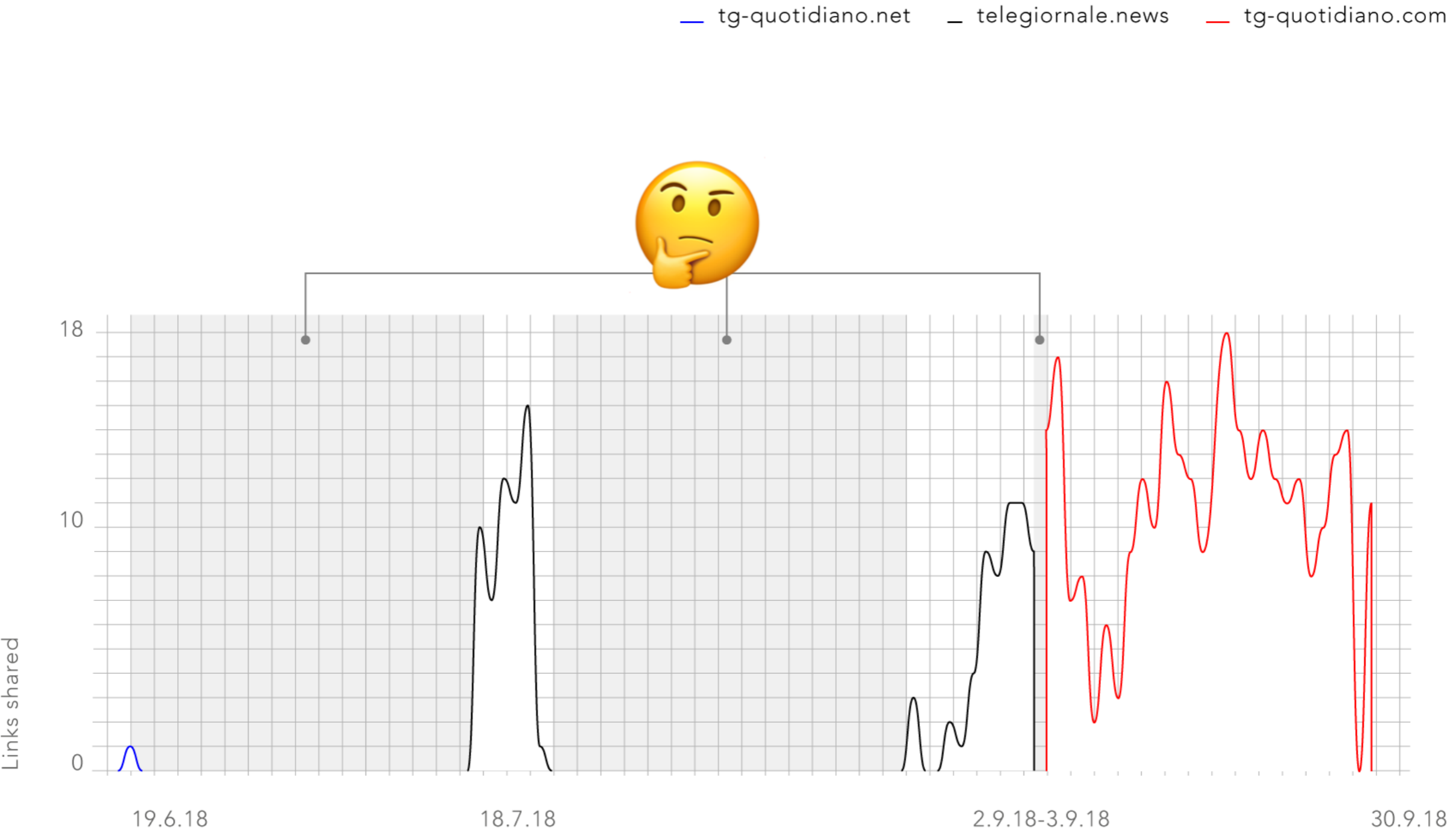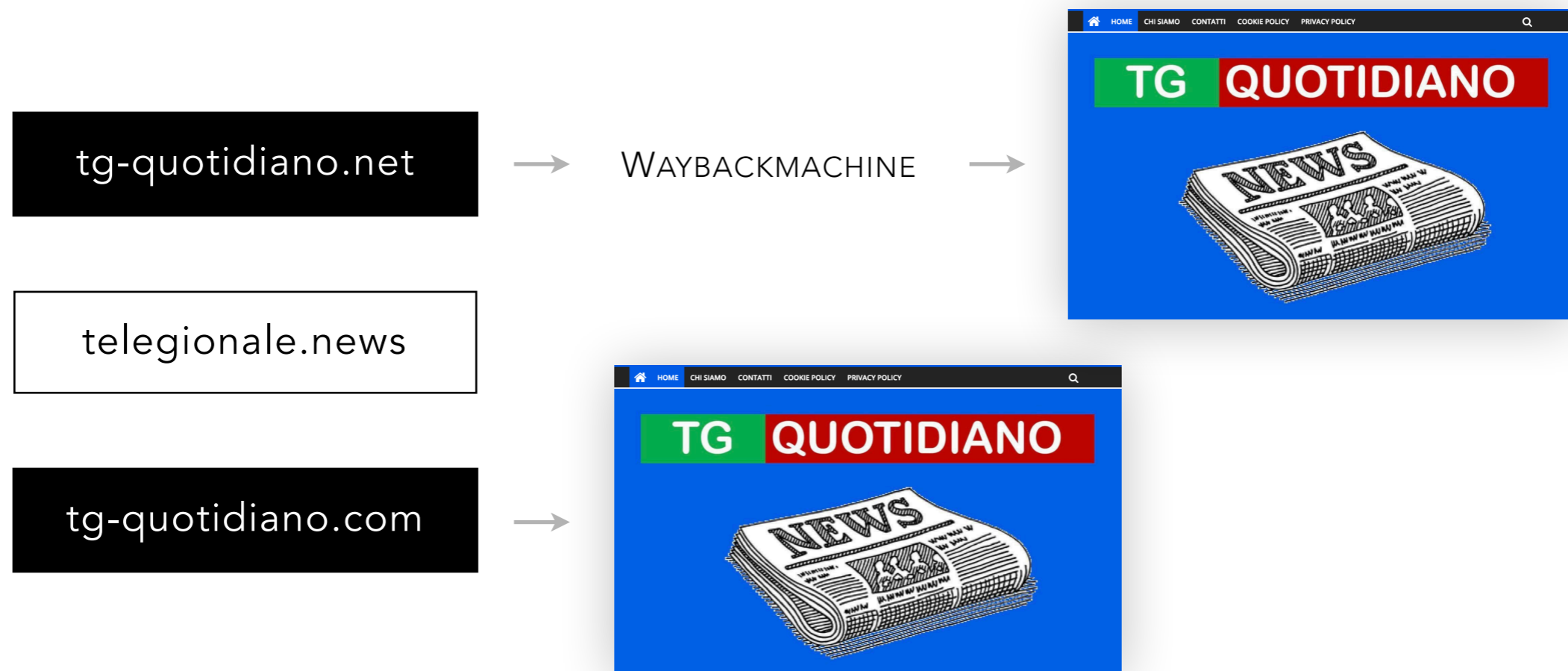
What about the Google Adsense ID?

tg-quotidiano.net → CA-PUB-4109166746041714

telegiornale.news

tg-quotidiano.com → CA-PUB-4109166746041714

tg-quotidiano.net → CA-PUB-4109166746041714

telegiornale.news → CA-PUB-4109166746041714

tg-quotidiano.com → CA-PUB-4109166746041714

😨

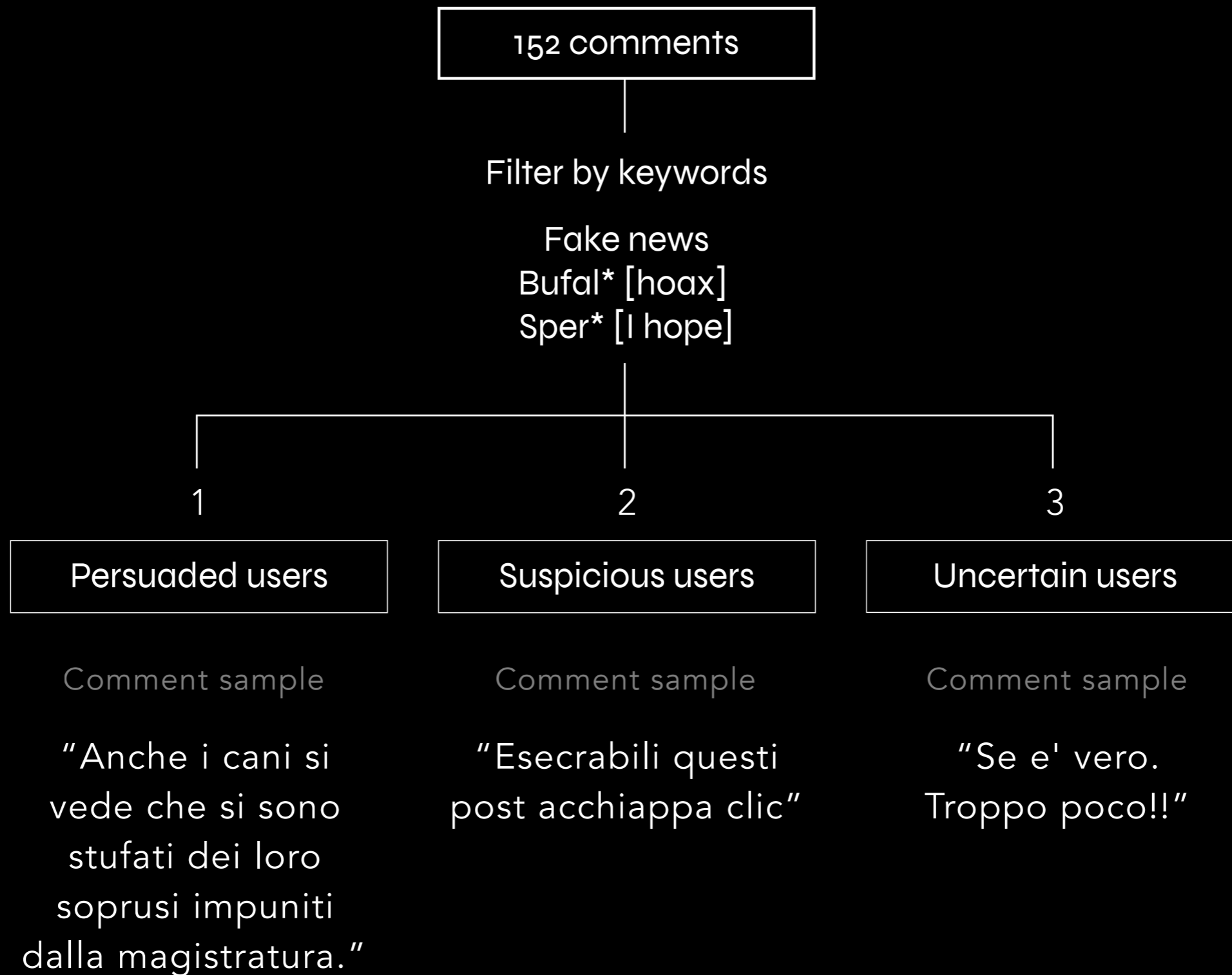## Adsense reverse lookup

CA-PUB-4109166746041714

↓

http://web-quotidiano.com

http://tgquotidiano.it

http://tgquotidiano.com

http://tg-quotidiano.org

http://tg-quotidiano.net

http://tg-quotidiano.com

Do users perceive there's something weird there?

152
comments

317 posts
5972 comments

3.9.18

16.9.18

30.9.18

Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network
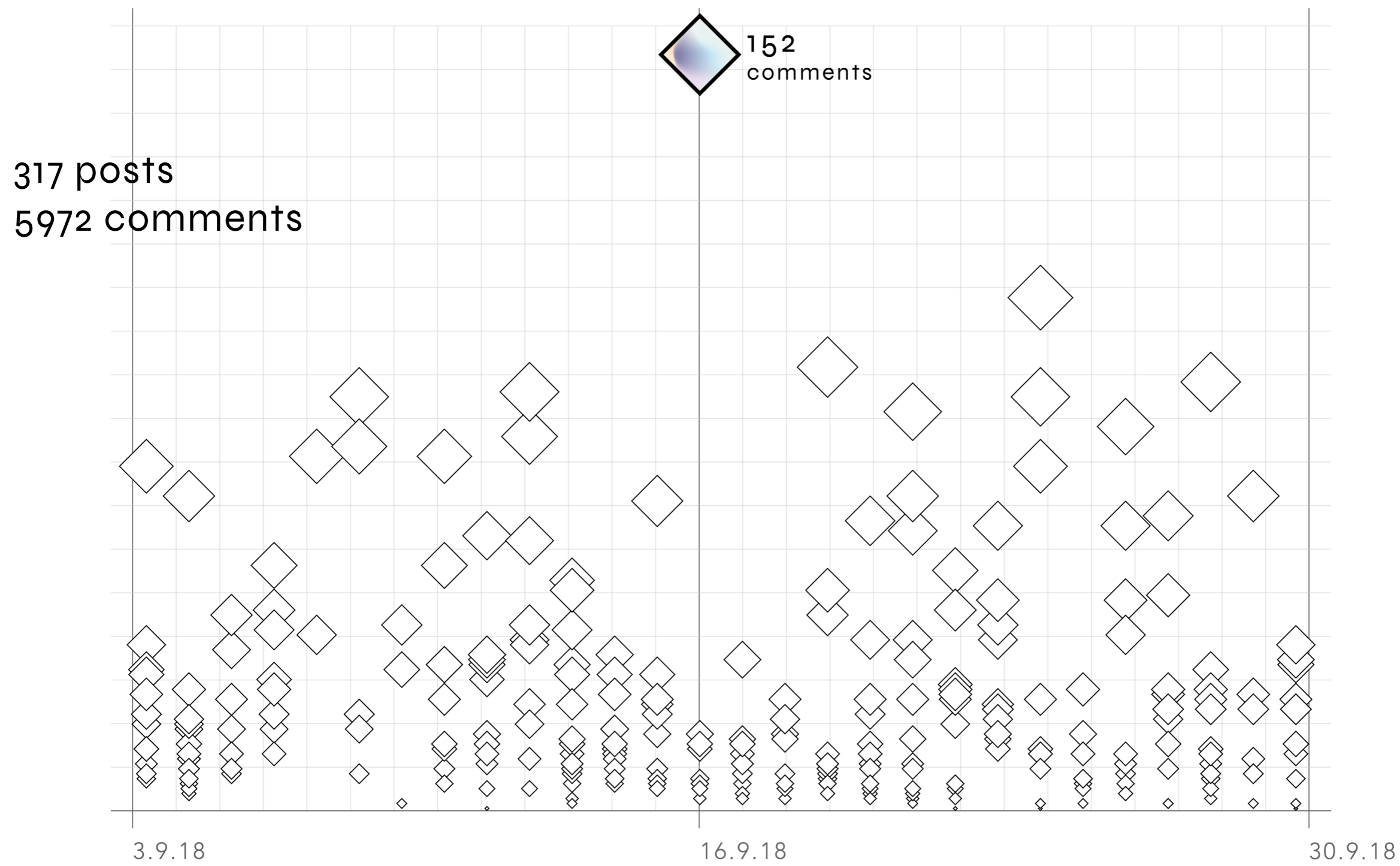
Dog beaten by a migrant, revolts and tears up his penis:
they want to put the dog down.
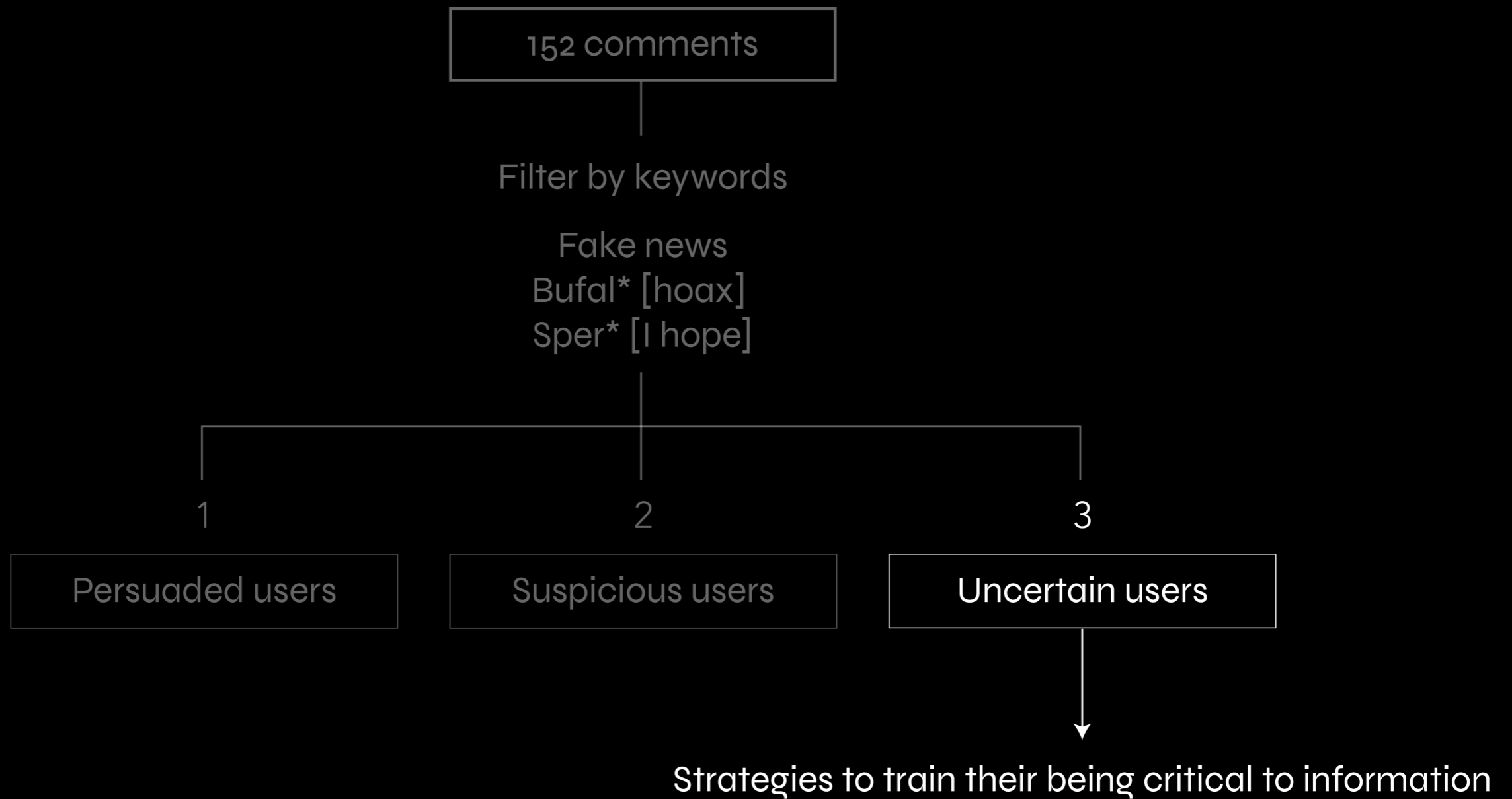
Reactive document

↓

Explorable Explanations

https://explorabl.es/

↓

Active reader

trame ascose

elena aversa

Questo è un sito sull'informazione online.
E sulla scelta.

Hidden patterns: reliability of online information sources and circulation of disinformation on the ITA FB network

01

Digital
transformation

02

Case study

03

Users involvement

01

▲
▼

POST FB

02

03

● **Titolo**
Veicolo immediato dei concetti presenti nell'articolo.

● **Immagine**
Veicolo visuale dell'impronta emotiva dell'articolo.

● **Fonte**
Indica il creatore del contenuto. In questo caso: La Repubblica e tg-quotidiano.com

Trascina i pallini, relativi agli elementi che compongono il post, nel cerchio di pertinenza.

01

▲
▼

POST FB

02

03

STRATEGIA #1

CHI HA CREATO IL POST CHE STO LEGGENDO SU FACEBOOK?

* Nella tua sezione notizie un contatto che conosci bene ha condiviso un articolo pubblicato su una fonte esterna.

TITOLO E FOTO 😱
TI SCONVOLGONO?

* Aspetta un attimo: prima di fidarti del contenuto, anche se rispecchia il tuo modo di vedere il mondo, dai un'occhiata alla fonte che lo ha pubblicato.

* 👆 SE NON TI SEMBRA AFFIDABILE: CONTROLLA IL SITO.
Se scorri fino in fondo, dovresti trovare le informazioni legali di registrazione della fonte al tribunale.
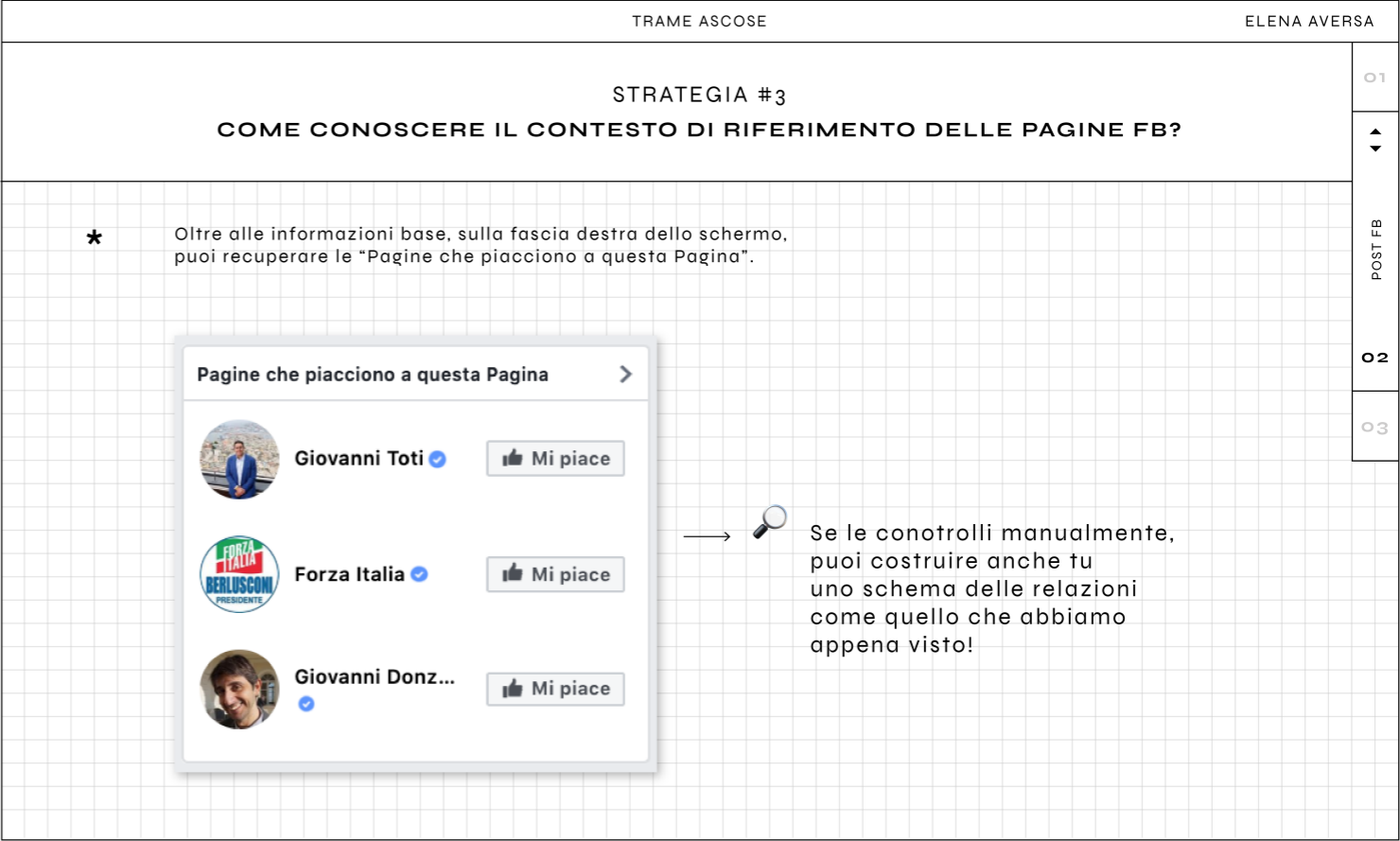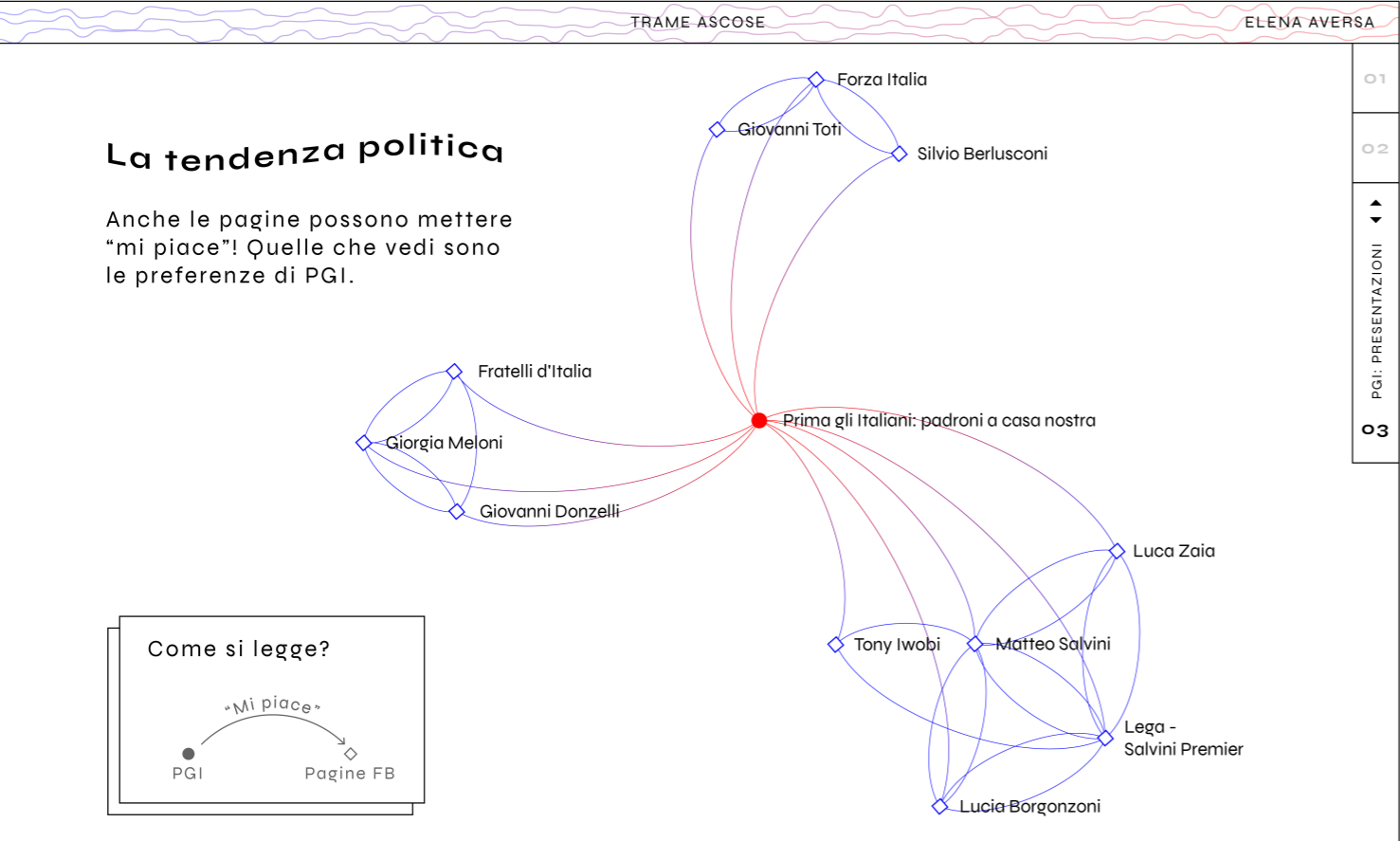
Le hai trovate?

😎 SI ⟶ Le hai trovate? Bene, è probabile che la fonte sia autorevole.

😳 NO ⟶ C'è qualcosa di sospetto...

La tendenza politica

Anche le pagine possono mettere "mi piace"! Quelle che vedi sono le preferenze di PGI.

Forza Italia

Giovanni Toti

Silvio Berlusconi

Fratelli d'Italia

Giorgia Meloni

Giovanni Donzelli

Prima gli Italiani: padroni a casa nostra

Luca Zaia

Tony Iwobi   Matteo Salvini

Lega - Salvini Premier

Lucia Borgonzoni

Come si legge?

"Mi piace"

PGI → Pagine FB

STRATEGIA #3
COME CONOSCERE IL CONTESTO DI RIFERIMENTO DELLE PAGINE FB?

* Oltre alle informazioni base, sulla fascia destra dello schermo, puoi recuperare le "Pagine che piacciono a questa Pagina".

Pagine che piacciono a questa Pagina   >

Giovanni Toti ✓   👍 Mi piace

Forza Italia ✓   👍 Mi piace

Giovanni Donz... ✓   👍 Mi piace

→ 🔍 Se le conotrolli manualmente, puoi costruire anche tu uno schema delle relazioni come quello che abbiamo appena visto!

👩‍🔬

In conclusion, how to supply fact-checking & debunking?

changing the general perception by **showing tools/methods**

+

deep understanding of the **concerned audience point of view**

👩‍🎓 Thank you!