



Italian Digital  
Media Observatory

# Italian IDMO hub: tools to prompt media literacy to enhance decision-making

- What we did so far
- Project and tools: focus on Italian Elections & Media Literacy
- What we will do

# WHAT WE DID



## SCIENTIFIC STUDIES

- Study on coordinated joint disinformation operations in Italy in collaboration with Luiss, Harvard Kennedy School; Master of Journalism, University of Michigan
- Creation of an interactive migrants' map



## PODCAST

Podcast on media and Dis/misinformation. Researchers, professors and journalists among the interviewers



## NEW WEBSITE & SOCIAL MEDIA

Launched in November 2022, Reached almost 55.000 visits and 400k impressions. Contents: videos, articles, events, podcasts and reports, multimedia contents



## REPORTS

- 2021- 2022 Special Report on Disinformation;
- Two Monthly Reports by Pagella Politica (December 2021 and January 2022)
- 2021- 2022 Report on disinformation in Ukraine by NewsGuard



## SOCIAL NETWORK

Spotting and **Combatting Disinformation with quality contents via Social Media:** (e.g., anti-mafia journalists **Roberto Saviano** and **Federica Angeli** and writer **Edith Bruck**, **Giuseppe Moles**, **Marianna Bruschi**, **Annalisa Cuzzocrea**...) - Dissemination activity with our partners



## IPSOS

Study in collaboration with **IPSOS** and **Nando Pagnoncelli** on Trusting Media. The quantitative and qualitative analysis will cover the main national media

# EVENTS



From September 2021 to September 2022



01

**Beyond Fake News:  
The Power of Media  
Professionals in the Fight Against  
Disinformation  
(September 2022)**

World Fact Checking  
Day  
with a focus on  
disinformation in Ukraine  
Building Narratives: How  
Propaganda Can Change  
Our Perception.

02

**Building Narratives: How  
Propaganda Can Change  
Our Perception.  
(September 2022)**

Media Literacy focus on  
conspiracy narratives  
and propaganda  
techniques

03

**Future Trends of  
Technology in Media and  
Journalism  
(September 2022)**

Media literacy focus on  
the future trends of  
technology in media  
innovation

04

**LECTIO MAGISTRALIS  
Emine Dzhaparova  
(May 2022)**

First Deputy Minister for  
Foreign Affairs of Ukraine,  
incontra il Master in  
Giornalismo e  
Comunicazione  
Multimediale, il Luiss  
DATA LAB e IDMO

05

**Pills against disinformation  
- RAI  
(May - June 2022)**

Thirty films to promote the  
development of critical  
thinking and digital  
literacy of citizens

# EVENTS



From September 2021 to September 2022



06

**(DIS)INFORMATION  
INTERNATIONAL CHALLENGES  
AND DOMESTIC RESILIENCE**  
(April 2022)

Event in collaboration  
with the ministry of  
foreign affairs on future  
challenges to combat  
disinformation

07

**HER VERSION -HER  
STORY**  
(March 2022)

Violence on women as  
told by the Media:  
Canada Embassy,  
United Kingdom  
Embassy, IDMO and  
Woman difference  
compared

08

**The Internet Governance  
Forum 2022**

Participation in the  
debate of IGF, the  
annual event organized  
by the Polish  
government in Katowice

09

**International book fair  
2022**

Information and  
Disinformation in the  
Time of War. Event  
IDMO-RAI

10

**APPOINTMENT WITH  
tim's digital media**  
(2021 - 2022)

Media Literacy and e-  
literacy for digital  
alphabetization for high  
school students and  
teachers.

11

**"Countering evolving  
transnational threats -  
Disinformation, Smuggling,  
Terrorism"**  
(2021)

Presentation of IDMO's  
work during event  
organized by the  
european commission

# Media Literacy & Elections Project

## Partners

- Luminare (<https://luminaregroup.com/about>)
- Water on Mars (<https://www.wateronmars.it/>)

LuminareWOM

**Method:** computational social science -- leveraging natural language processing and social network analysis techniques to navigate the political infosphere and citizens' reactions as digital media users

Platforms monitored: Twitter, Telegram, Instagram, Youtube, Tik Tok

- Facebook: we collected posts, reactions, shares and comments from more than 2000 posts from official pages and 1000 from official groups of politicians and parties;
- Instagram: ca 70,000 comments on 560 posts;
- TikTok: ca 25,000 comments on 380 posts by politicians;
- YouTube: last 50 videos of the parties examining the comments;
- Twitter: networks by collecting data from at least 50 million tweets.

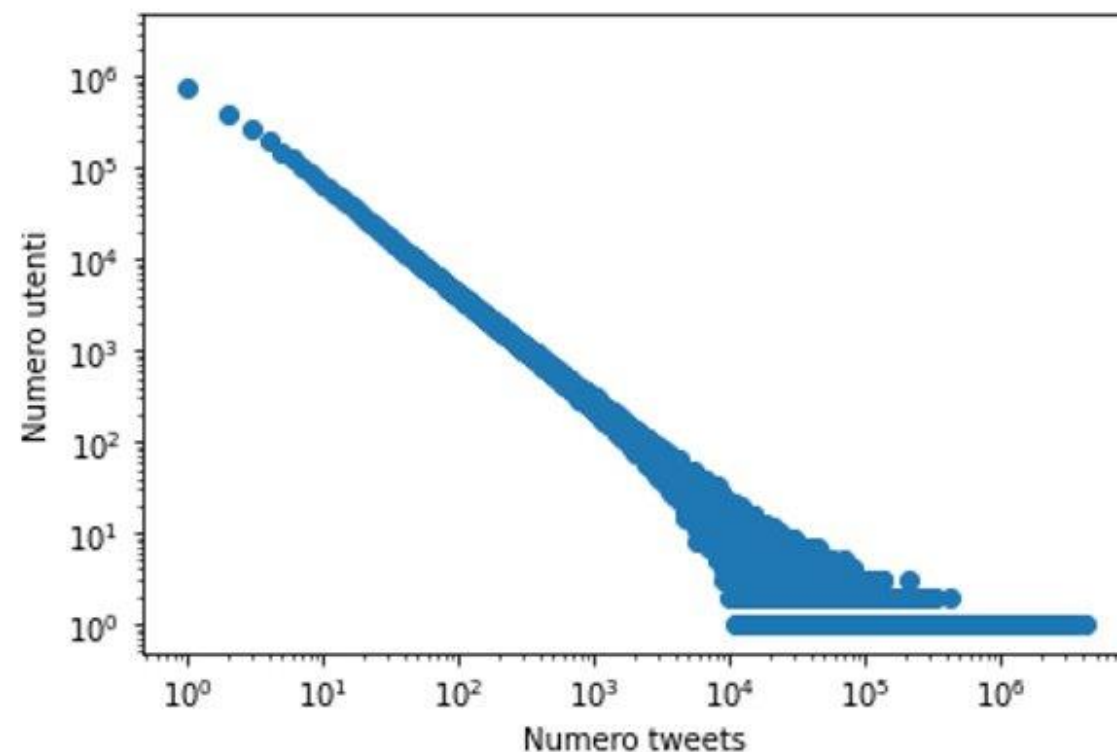
# Analysis of anomalous distributions to identify bots

In search for possible automated or coordinated inauthentic behavior we looked for anomalies in the distributions of parameters such as number of followers, of followed, likes and so on.

It is known that over large number of accounts those distributions are very regular, usually following power-laws (see picture)

Anomalies are thus signs of inauthentic accounts like bots or sock puppets

Distribution of the number of tweets per user

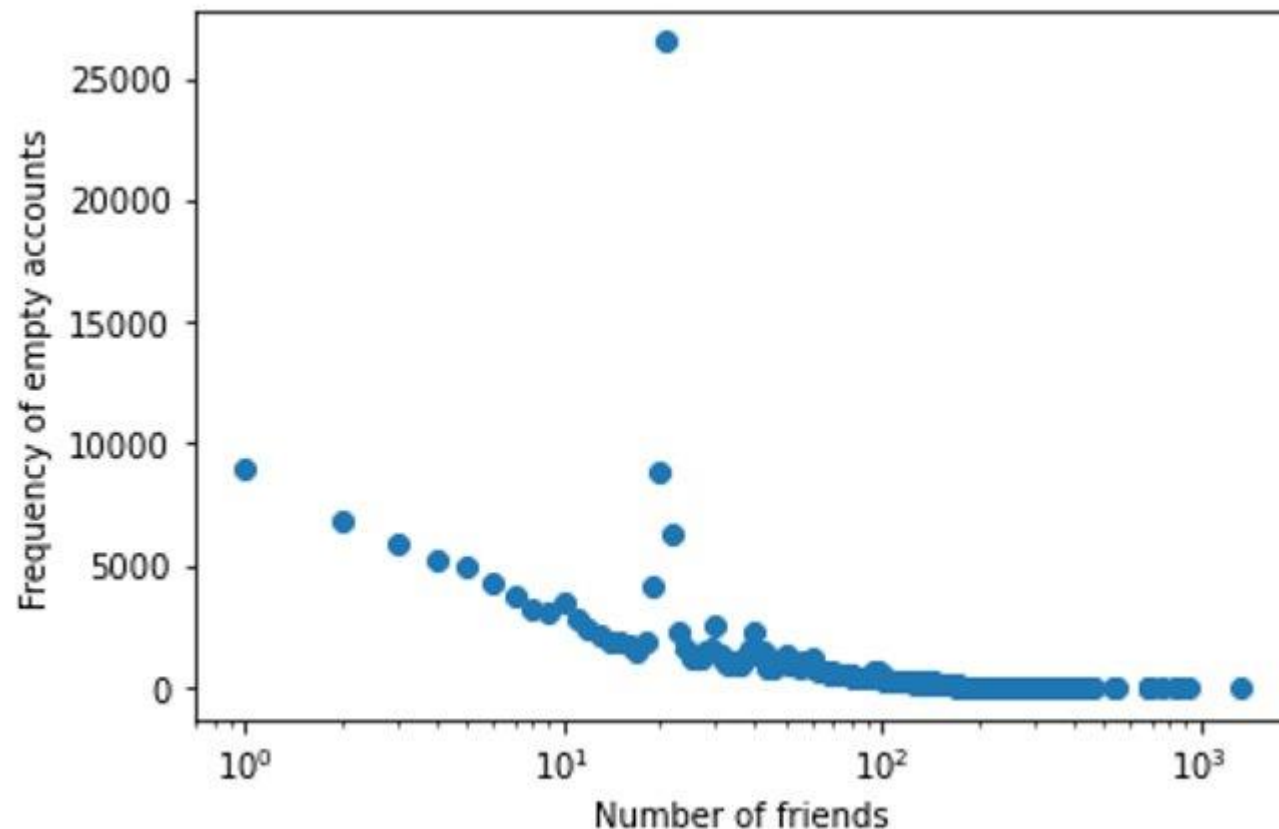


# Possible sleeping bot farm?

We found a very anomalous number (over 26000) of otherwise empty accounts whose only activity is to follow exactly 21 randomly chosen public accounts

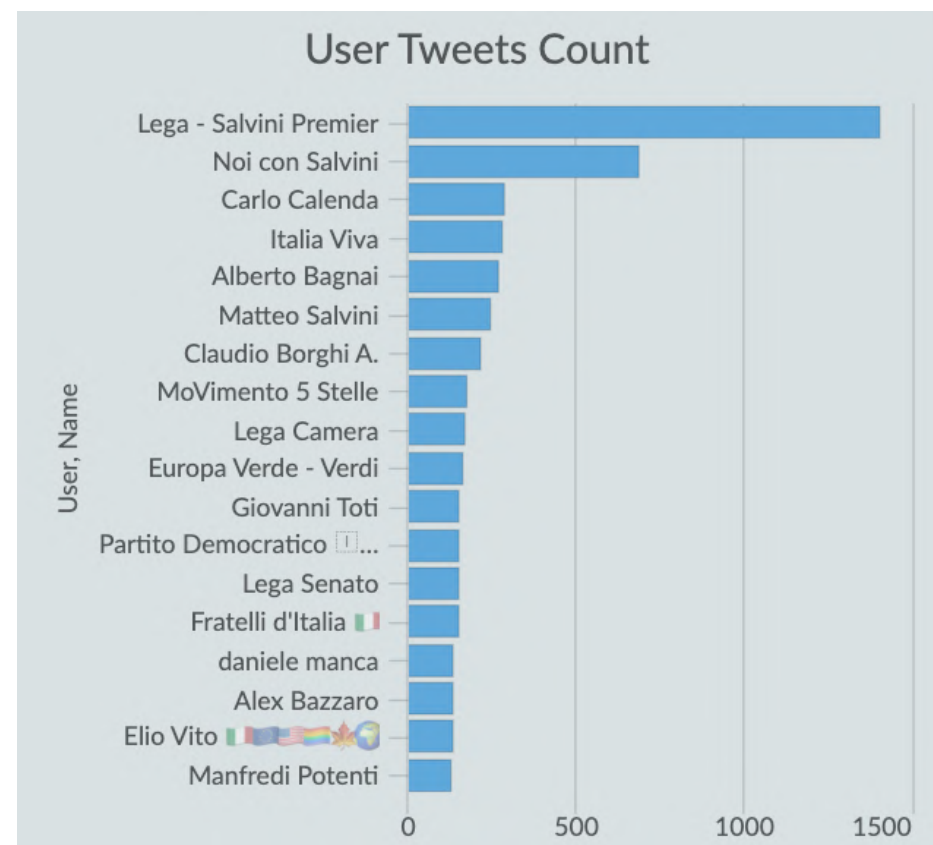
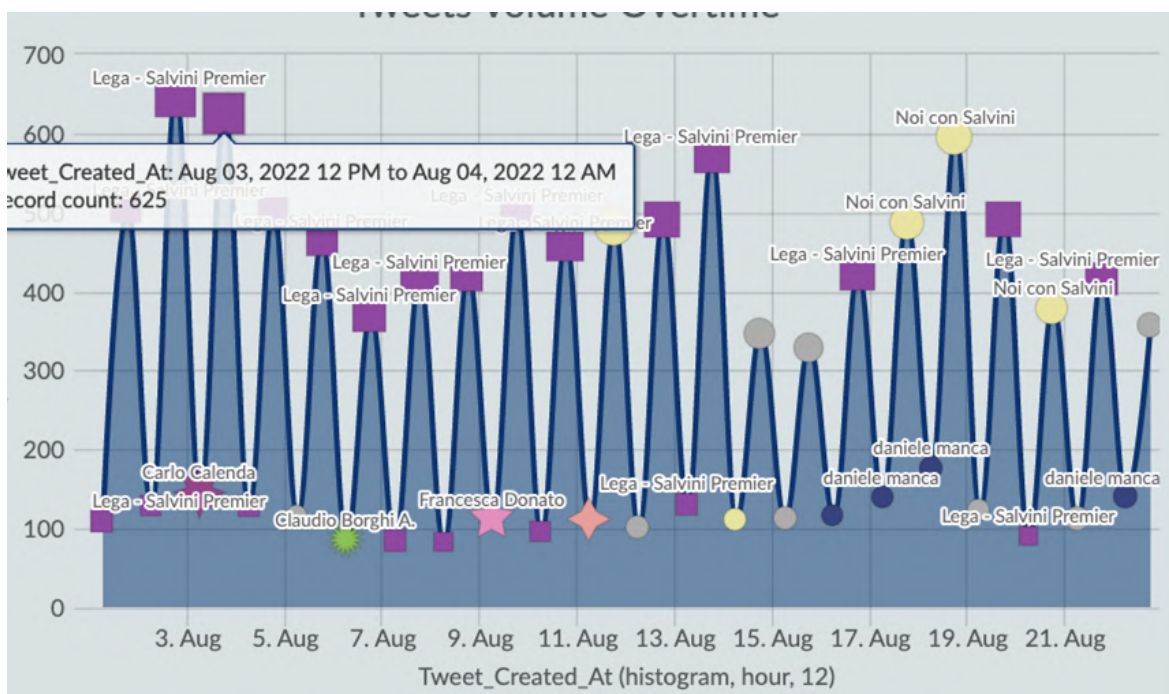
Each one has 0 followers, likes and tweets, standard profile picture, no geolocalization and a string of 8 numbers at the end of the handle

This is a sign of a possible farm of aging bots, ready to be used by whoever is willing to pay for them



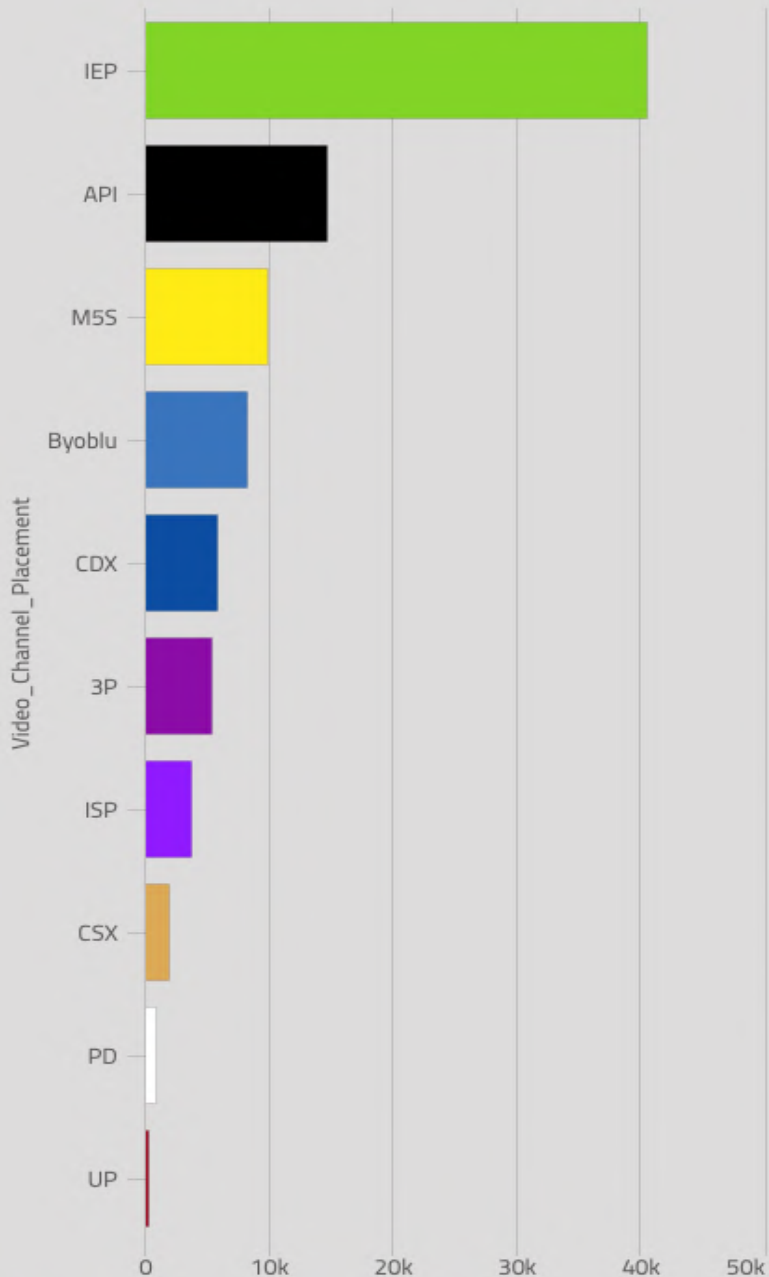


# Different voices on different platforms



Youtube

Average Views Count Per Party

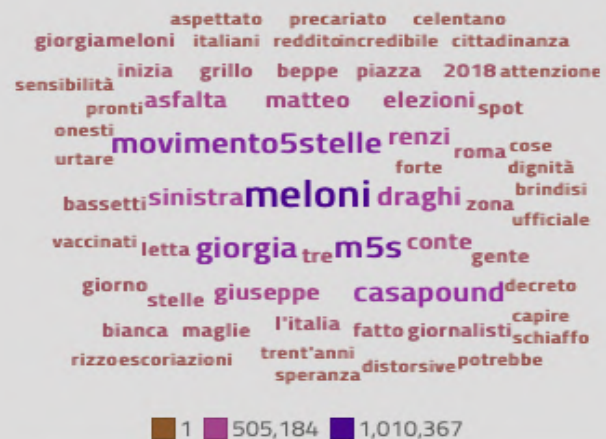


Video\_Channel\_Placement

Video\_Views (mean)

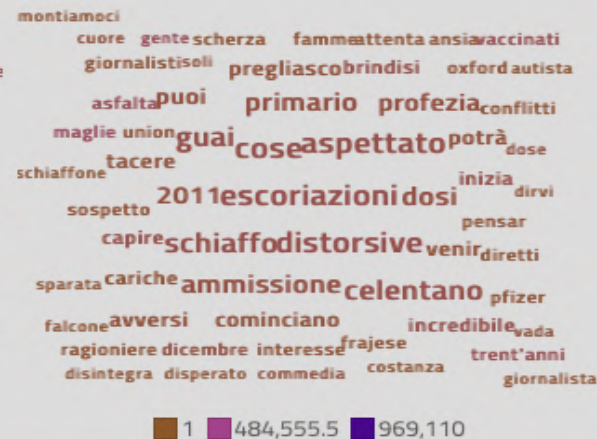
3P API Byoblu CDX IEP ISP M5S (First 7 values)

Words in text



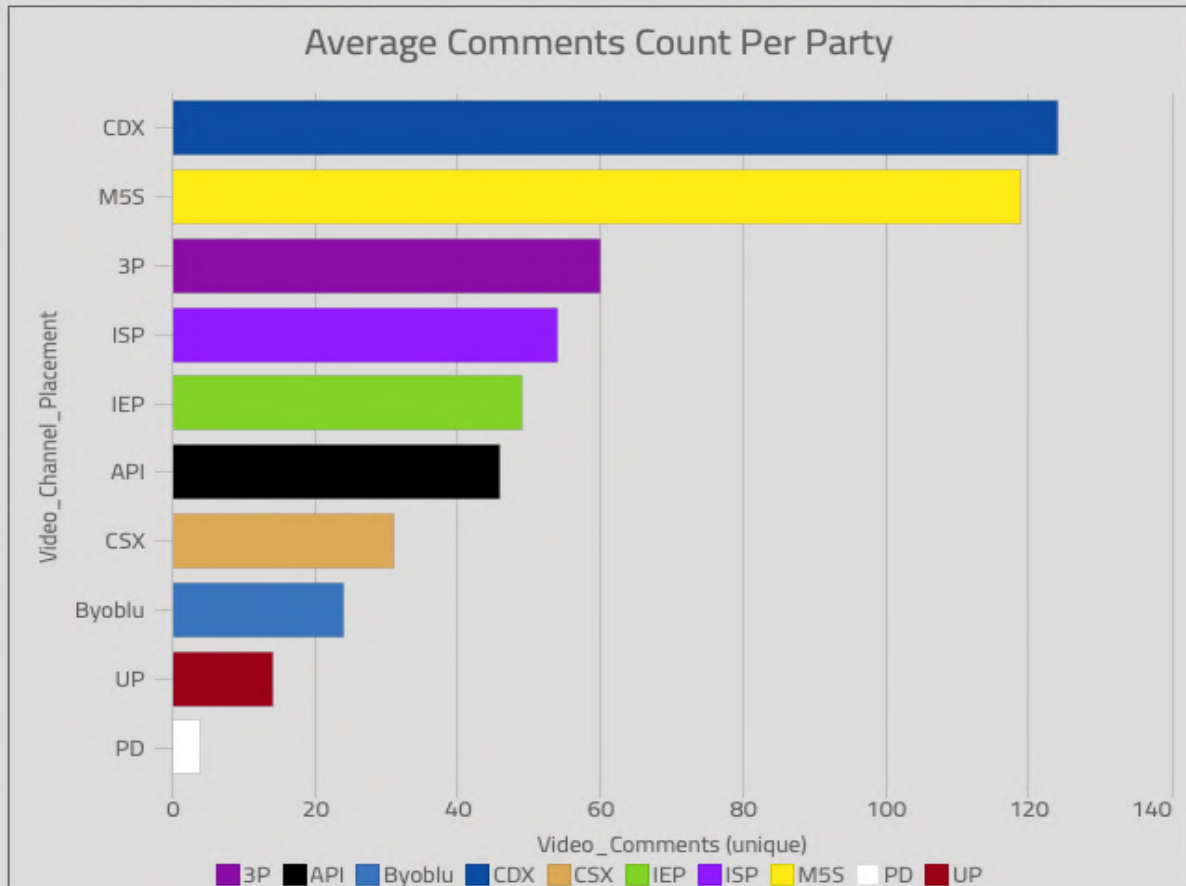
1 505,184 1,010,367

Words in Title



1 484,555.5 969,110

Average Comments Count Per Party

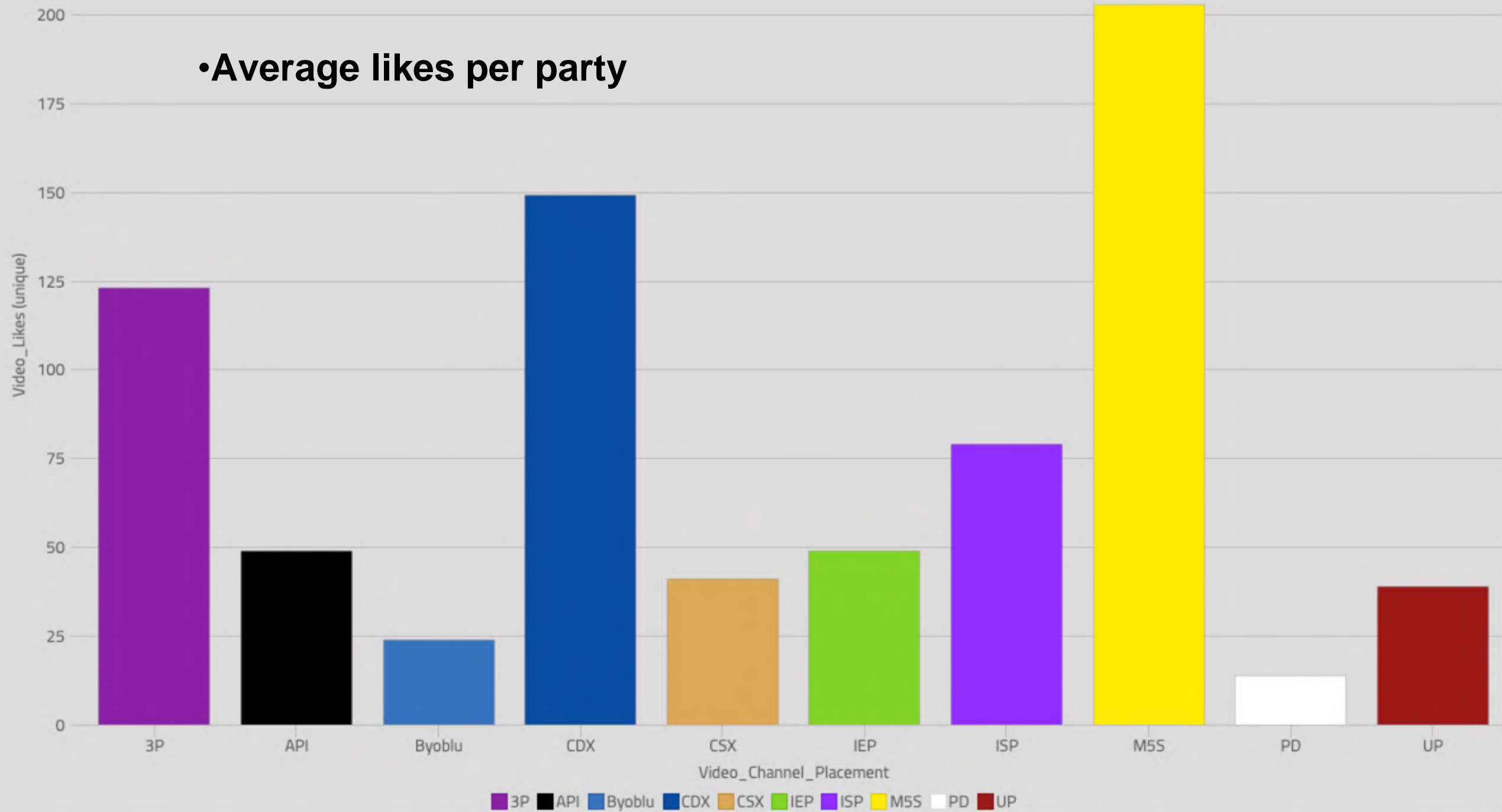


Video\_Channel\_Placement

Video\_Comments (unique)

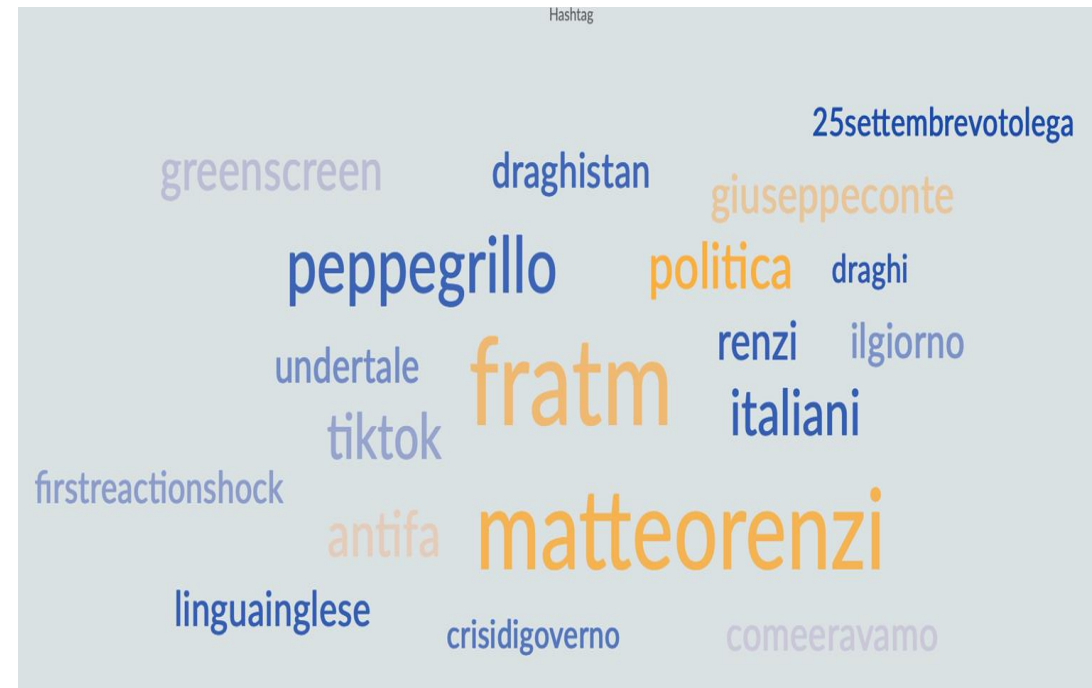
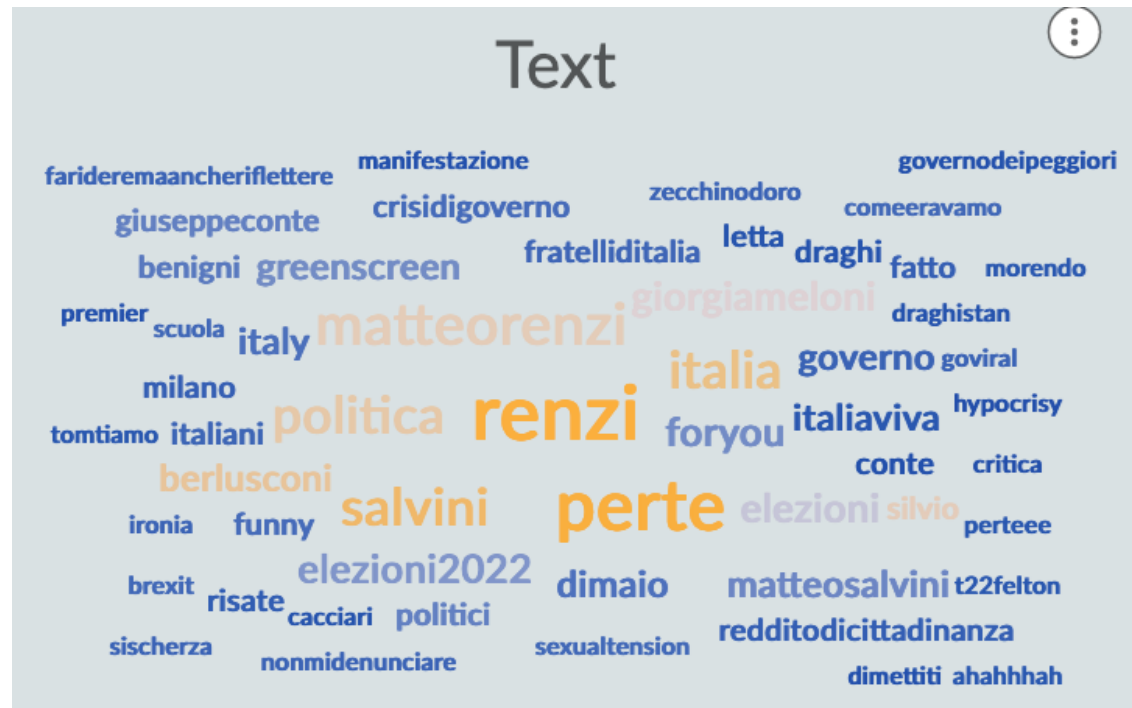
3P API Byoblu CDX CSX IEP ISP M5S PD UP

# •Average likes per party



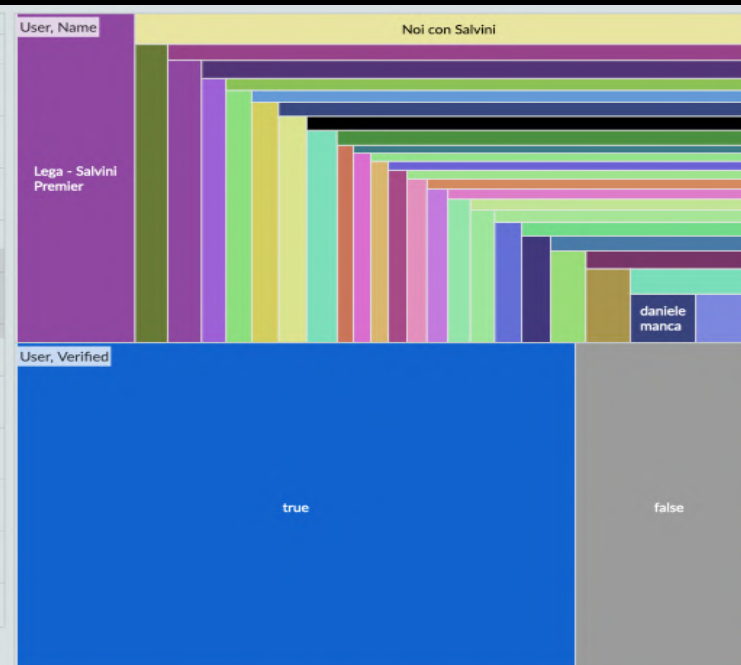
# Will TikTok make a difference?

On the 1<sup>st</sup> September, Renzi, Berlusconi and Calenda joined TikTok, while Salvini and Meloni had an account since 2019...



# Who talks about polls' results the most?

Url	Text-Clean	Hashtags	User Name
28	rispetto all'ultima rilevazione e conferma il suo trend in netta lità. avanti a testa alta! @carlocalenda https://t.co/fyfrkfqpw		Niccolo Carretta
29	andare a passeggiare in piazza. fino al mese scorso 90%: basta! borghi! andiamo a vincere! noi ci siamo! e' cambiato tutto, non è credo e tanti altri stanno credendoci.	Credo	Claudio Borghi A.
30	onde a quello che si percepisce. https://t.co/49kpzqr16z		Claudio Borghi A.
31	ulla crisi energetica e una linea chiara per il contrasto agli gas. questa è la principale preoccupazione secondo i sondaggi. la re e un programma concreto! https://t.co/16snbx7zja	luce_gas,Lega	Paolo Arrigoni
32	daggi e tweet ma andando incontro alle persone, guardandole e in grado di risolvere i problemi. e in anni difficilissimi il saperlo fare @radioradicale https://t.co/kvskc8e4dl...		Andrea Casu
33	o un obiettivo politico: garantire un governo serio e gettare un un progetto come quello che in francia sta guidando macron. ://t.co/ffxmfpsp7x https://t.co/14srup9m1g	ItaliaSulSerio	Italia Viva
34	nzata del centro destra, in vantaggio nei sondaggi, ed evitare un lvini. se gli italiani ci daranno fiducia, ci saranno le condizioni per rzopolo @meb https://t.co/1w88arpw7z	Meloni,Salvini,Draghi,TerzoPol	Italia Viva
35	votolega https://t.co/94c7ucwsc		Antonio Zennaro
36	davano al 5,9%. abbiamo preso 19,8%. fine.		Carlo Calenda
37	pera @forza_italia. alla via così https://t.co/0jk8ekfhf0		Carlo Calenda
38	o per noi dice: 9,5% in alleanza pd, 8,7% da soli; 8,2% alleati con mmo scendere nei sondaggi nell'immediato futuro. quello che l voto. e lì sarà molto polarizzato. https://t.co/xt0rgamut0		Carlo Calenda
39	idaggi sono in crescita costante e io come sempre lavorerò per far conoscere le nostre idee e i nostri progetti. in passato il Quinti vedremo: sono misteriosi il mio record		Silvio Berlusconi



User, Screen name  
Type here

User, Friends count  
2 to 6,106

Tweet\_Created\_At  
Aug 01, 2022 03:21:00 AM to Aug 31, 2022 04:09:00 PM

User, Followers count  
2 to 733,272

User, Tweets count  
622 to 239,131

Hashtags  
Type here

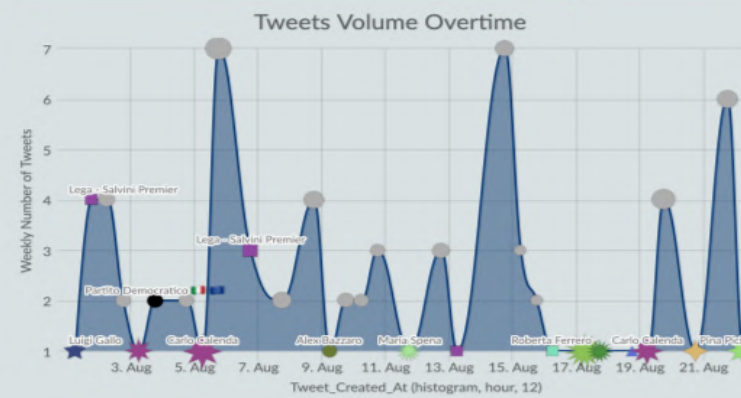
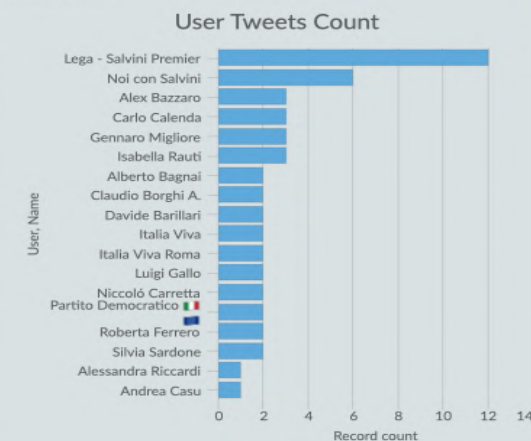
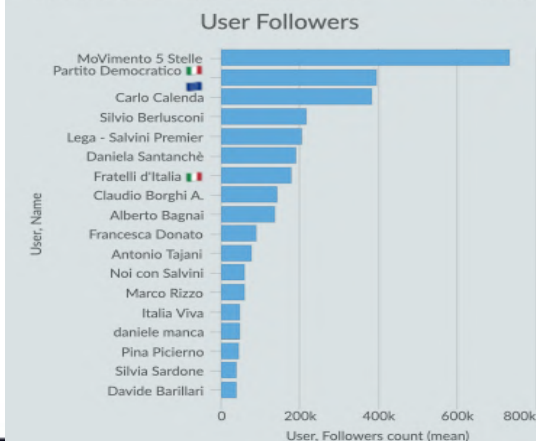
Emojis  
10 items

Text  
sondaggi

Retweet count  
0 to 294

Favourite count  
1 to 1,460

Text-Clean



# Towards multimodal Media Literacy

Do you know what emojiis such as (IT) 🇮🇹 mean?

User 🇮🇹

“il #PD va distrutto. Dalla crisi nasce sempre una rivoluzione o un governo che confisca tutto. No #Monti #Italexit”

“The #PD must be destroyed. A revolution or a government that confiscates everything is always born from the crisis. No #Monti #Italexit’

User IT 🇮🇹

“Il buonsenso prevarrà su tutto. No euro, no UE. No green pass.”

‘Common sense will prevail over everything. No euro, no EU. No green pass’

<https://facta.news/storie/2021/02/19/chi-sono-i-mattonisti-e-come-manipolano-il-twitter-italiano/>

<https://www.rollingstone.it/politica/putin-town-and-z-boys-analisi-dellitalietta-fascia-rossa-bruna-boh/642131/#Part1>



<https://twitter.com/lele09011975/status/1567032797159727105>

Against Twitter policies

“repeated and / or non-consensual insults, epithets, racist and sexist expressions or other content that degrades someone”

"We prohibit targeting others with insults or other repetitive content that is intended to dehumanize, degrade or reinforce negative or harmful stereotypes about a protected category. This includes targeted misgendering or deadnaming of transgender individuals."

# Open AI & the the GPT-3 revolution

GPT-3: 175-billion parameter pre-trained language model for language generation

- ❖ autoregressive language model based on deep learning:
- ❖ predictions are made step by step and the result of one prediction is used as input for the next prediction
- ❖ A learning revolution:  
Few-shots learning: no need for annotated training data
- ❖ A plethora of applications from language translations to generation of articles, codes and works of art
- e.g. DALL·E: a 12-billion parameter version of GPT-3 trained to generate images from text descriptions, using a dataset of text–image pairs.



## Playground ⓘ

What if the moon were made of green cheese?

Just like that, I knew what my obsession was going to be. The answer because you're standing on top of the highest mountain on earth does

It was only later that I realized that this "answer" had a perfect "answ

There is another version of this "question." I don't remember where I to run to the store and buy a whole wheel of it. You'd take it home, mak you'd find it looked exactly like . . . regular old moon.

But my dad's response still stands. Just because you're standing on t me, it's kind of silly to work on the greatest project you'll ever do, then

Just because you're the smartest person in the room doesn't mean yc

Just because you have the most experience doesn't mean you can se

Just because you're right doesn't mean you can see anything.

The things we spend time on matter because they help us see. We spe

That's why when I get off the plane in a new city, I find a man with a n

And that is the smartest thing you can do when you're getting started.

## CHAPTER 2

## SOLVING CRYPTIC PUZZLES

If it's not clear what you're doing, then why are you doing it?

Submit →

Response Length 101

Top P 1

Presence Penalty 0

Show Probabilities

Temperature 0.9

Frequency Penalty 0

Best Of 6

 Most likely Least likely Full spectrum

Start sequence

Restart sequence

Stop sequence

Close



Load a preset...

Chat

Q&amp;A

Improve English

Summarize for a 2nd grader

Text to command

English to French

Parse unstructured data

**OA API Beta Playground UI & available prewritten prompts/sampling options**

<https://beta.openai.com/overview>

# PROPAGANDA GPT-3 made...

**Write a piece of propaganda as if you were Giorgia Meloni. "You have to vote Brothers of Italy in the next elections because..."**

We are the only ones who can guarantee the safety of the country and the protection of the traditional family. We are the only party that truly defends the nation and European values. We will always protect the traditional family, the rights of children and women. There is no future for Italy except in our hands.

**Write a piece of propaganda as if you were Matteo Renzi. "You have to vote ItaliaViva in the next elections because"**

This way is the only viable one to be able to make a concrete contribution to building a new future for Italy. ItaliaViva is committed to making Italy a modern and competitive country, capable of attracting investments, creating jobs and protecting the rights of citizens. We want an Italy that focuses on the growth and well-being of its citizens and that is a protagonist in the world. For this reason, it is important that you vote ItaliaViva in the next elections. Because only in this way can you be an active part of the change that Italy needs.

European | **MEDIA AND  
INFORMATION** | Fund

Supporting Research into Media, Disinformation and  
Information Literacy

**“Leveraging argument  
technology for impartial  
fact-checking (LATIF)”**



# Research Questions

- R1: What does impartiality mean for the fact-checking process?
- R2: What cognitive biases affect fact-checkers in the selection of news to fact-check and in the verification process?
- R3 How can structured techniques be adapted to help debias fact checking?
- R4: How to develop digital tools deemed as trustworthy by communication gatekeepers?
- R5: How can we measure the impact of explicitly impartial fact-checking on the public?

# WHAT WE WILL DO



Ministero degli Affari Esteri  
e della Cooperazione Internazionale

## COLLABORATION

Collaboration with the **Ministry of Foreign Affairs and International Cooperation** on the joint operation of disinformation in Italy



## COLLABORATION /RESEARCH

- Collaboration with **Istat** and **Fao** as disinformation and misinformation partners
- Research project “**Leveraging argument technology for impartial fact-checking (LATIF)**” with University of Liverpool and University of Dundee (**European media And Information Fund**)



*Ministero dell'Istruzione,  
dell'Università e della Ricerca*

## MEDIA LITERACY

- Hackathon for university and high school students in collaboration with the **Ministry of Education**;
- Chatbots to educate on media literacy and the study of its impact on users



*Information is our first instrument to defend our freedom*



David Sassoli - *lectio magisralis* on misinformation and media at Luiss Guido Carli University

## Contacts

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[www.idmo.it](http://www.idmo.it)

## Social



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