



Opportunities and challenges of social media: a sociological approach

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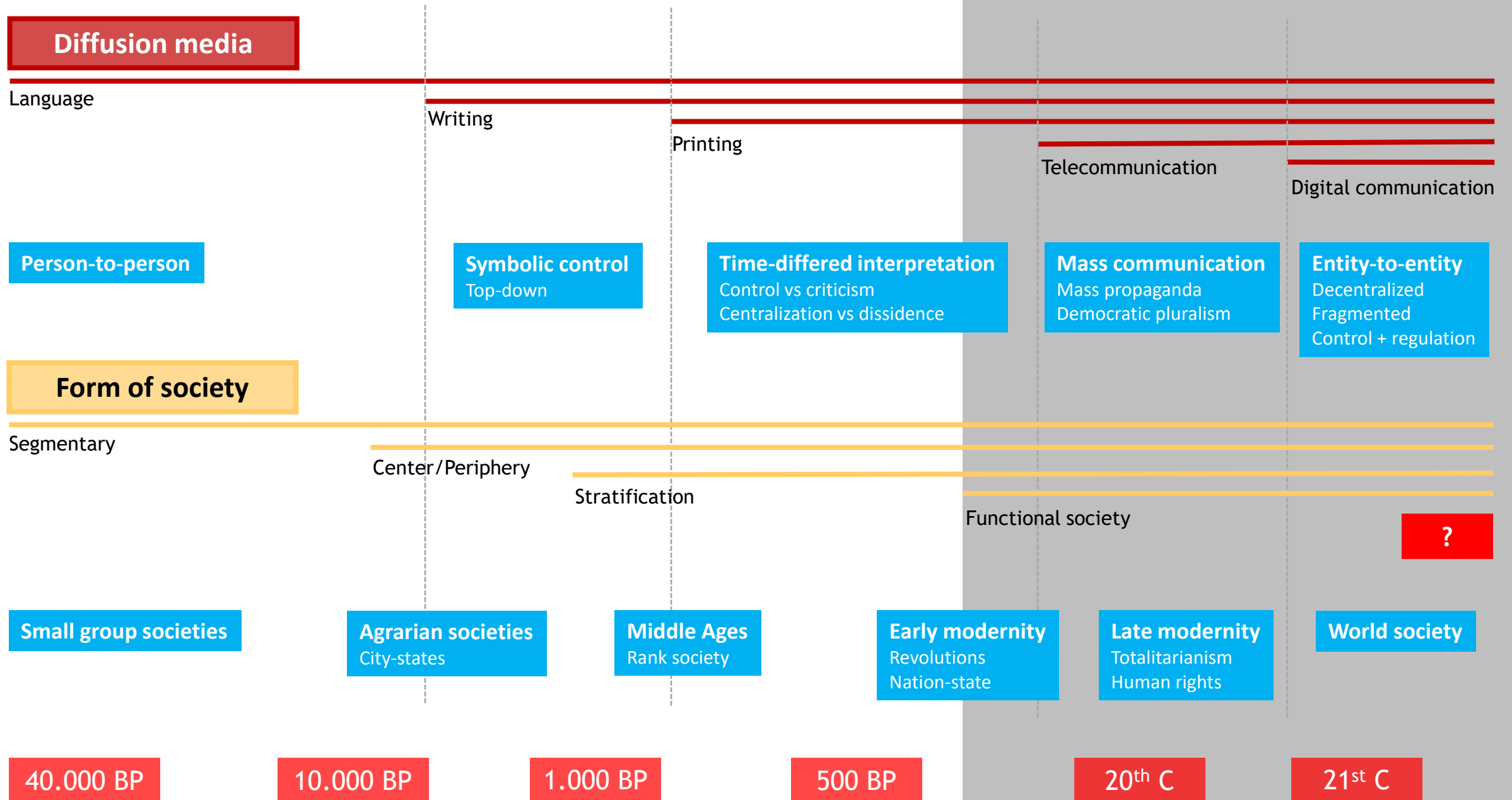
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Putting things into perspective: Evolution of social communication



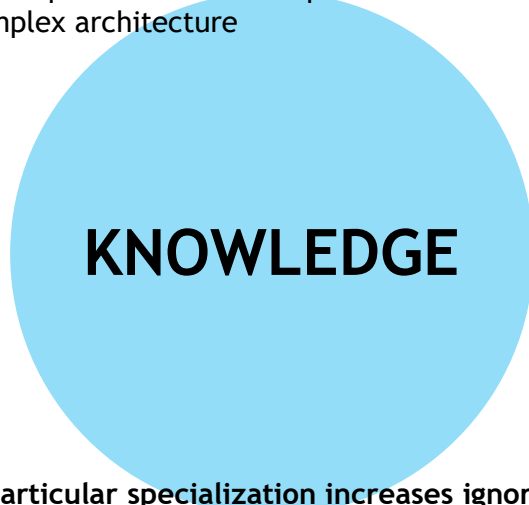
The paradox of knowledge

What we know about our society, about the world we live in, we know it through the mass media – Niklas Luhmann

SPECIALIZATION



- Knowledge is embedded in every social process
- Interdependence between processes
- Complex architecture



- Particular specialization increases ignorance
- Interdependence of invisible ignorance
- Complex risks vs complex stupidity

IGNORANCE



The digital matrix --- Internet, digital social networks, platforms, AI

A distinctive feature of society in the 21st century is that most of its structures and processes are permeated by and depend on the production of highly specialized knowledge, without which operations could not occur.

The dark side of this, however, lies in an exponential production of non-knowledge (ignorance, unawareness, blind spots), which only comes to light when operations collapse precisely as a result of the complex repercussions of non-knowledge.

Therefore, knowledge in modern societies is knowledge plus non-knowledge. Knowledge increases ignorance, making more knowledge necessary to reduce new uncertainties that reproduce the spiral of associated risks.

Digital apocalypse: the pop-paranoia (Zuboff)

Surveillance capitalism

New form of big-data-driven information capitalism aimed at predicting and modifying human behavior as a means to produce revenue and market control.

Big Other

Surveillance capitalism is the puppet master that imposes its will through the medium of the ubiquitous digital apparatus. I now name the apparatus *Big Other*: it is the sensate, computational, connected puppet that renders, monitors, computes, and modifies human behavior. Big Other combines these functions of knowing and doing to achieve a pervasive and unprecedented means of behavioral modification. Surveillance capitalism's economic logic is directed through Big Other's vast capabilities to produce instrumentarian power, replacing the engineering of souls with the engineering of behavior.

Critique



- Zuboff assumes that the current state of affairs is the same as the future state: present future (today) = future present (tomorrow) --- “things can only get worse”.
- She does not observe that there have always been regulatory advances from the time of *wild capitalism* until today.
- She also fails to consider the many legal regulations society has developed in recent decades: *lex mercatoria*, *lex digitalis*, arbitration courts, regulations (EU, neuro-rights).

Ontological fallacy

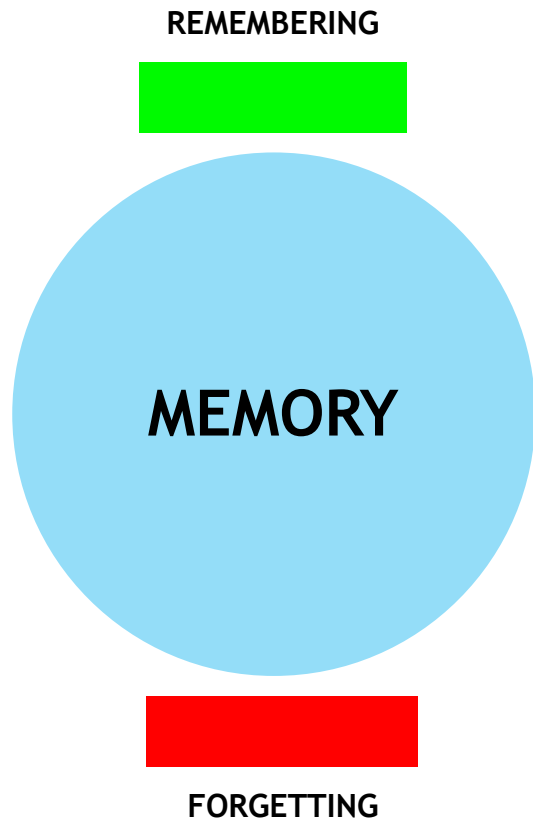
Risk

The question is not determining when there will be a generative AI, but what is the minimum acceptable risk level and what is the *safety theory* built from that point --- and **the problem** is that the creation and implementation of robust AI safety using the first AGI can't be done in time, because the safety approach should be able to anticipate AGI risks (limitations of neural nets, reflexive machine learning, hardware) (Turchin 2019).

Plan B

- Active AI boxing and control system, including limiting AI capabilities via “**artificial stupidity**”
- Creation of the **simple version of AI safety theory**, where all known up-to-date ideas are presented in a form which can be used by AI developers
- International **agreements** to control AI
- Identify biases in historical datasets (Esposito 2022)

Opportunities and challenges of the digital matrix: memory



Definition

Memory operates in the present. It is a present selection of past events. Its main function is forgetting, the release of the capacities of the system. In this sense, memory discriminates continuously between forgetting and remembering, and in this way it is in a position to condition itself, namely its remembering.

Challenge

Especially since the spread of Web 2.0, with its virtually unlimited capacity to store and process data, the web seems to allow for a form of perfect remembering. Indeed, our society seems to be able to remember everything. The web, which stores all data in a kind of eternal present, is not able to forget, yet is also not even able to properly remember.

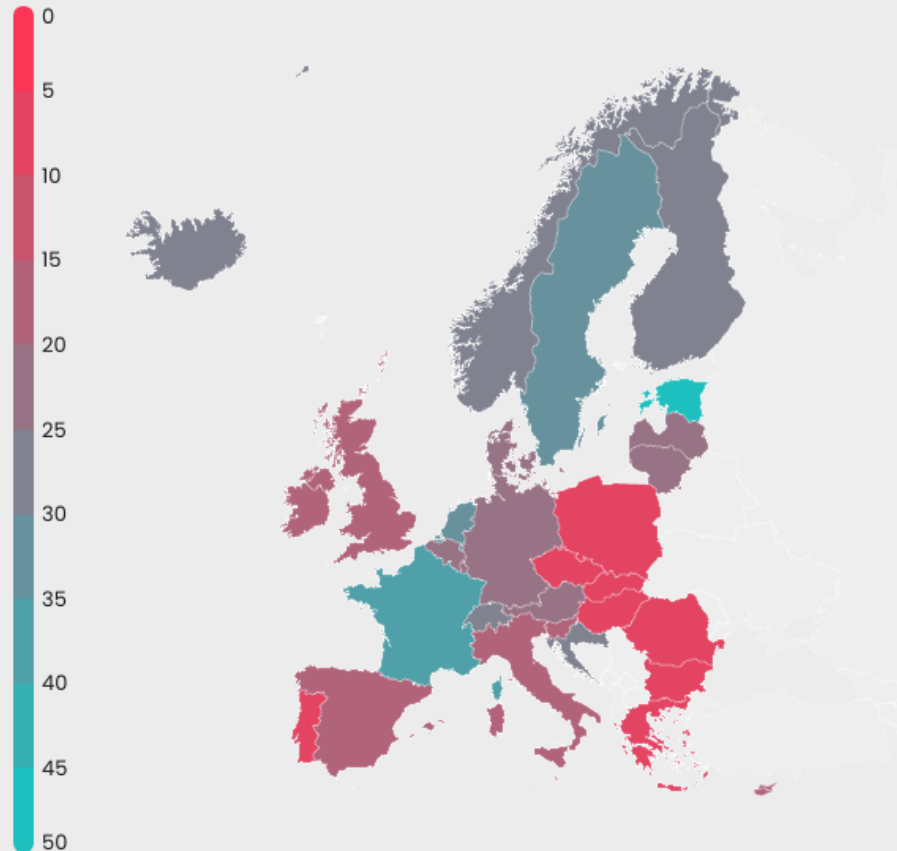
Opportunity

With the capture of the moment and by immediately uploading it to Instagram, Facebook, or whatever, one can communicate eternally about that photograph --- that is, the present is prolonged into the future as a form of *past present* that is always re-actualizable in communication.

Opportunities and challenges of the digital matrix: right to be forgotten

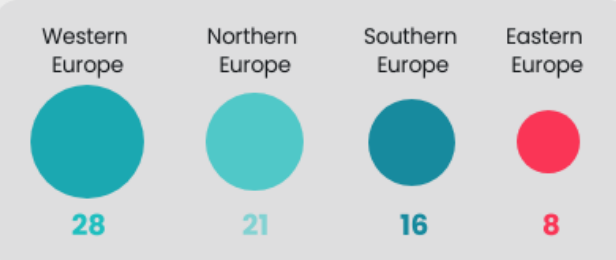
Estonia has the highest "right to be forgotten" request density

"Right to be forgotten" request density (requests per 10,000 people), per country and European subregion



Top countries	Subregion	Requests/10 k people
1 Estonia	Northern Europe	53
2 France	Western Europe	40
3 The Netherlands	Western Europe	32
4 Liechtenstein	Western Europe	31
5 Sweden	Northern Europe	30

Bottom countries	Subregion	Requests/10 k people
1 Bulgaria	Eastern Europe	5.6
2 Hungary	Eastern Europe	6.5
3 Slovakia	Eastern Europe	7
4 Portugal	Southern Europe	7.5
5 Romania	Eastern Europe	7.9

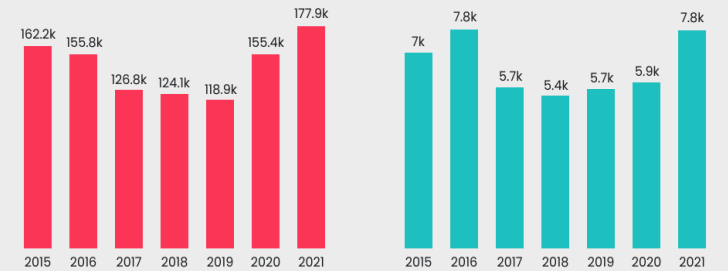


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96% of "right to be forgotten" requests are submitted to Google

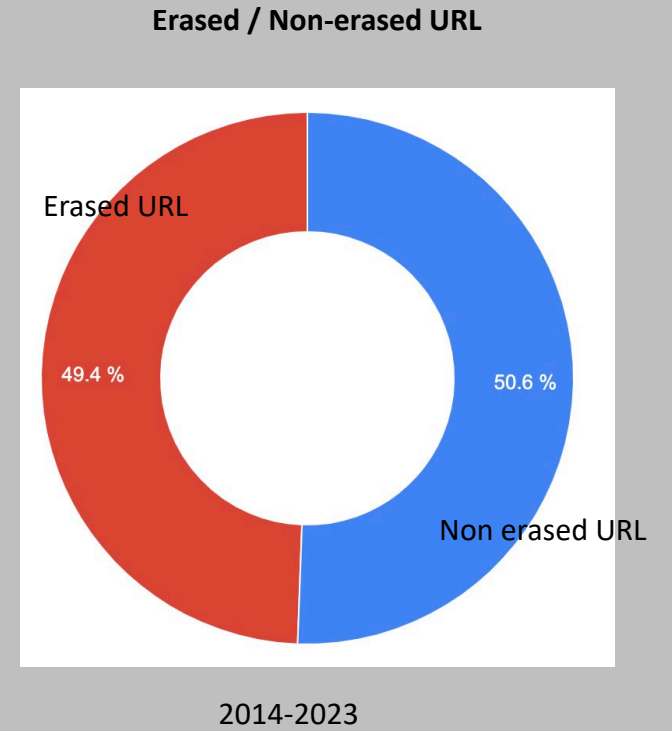
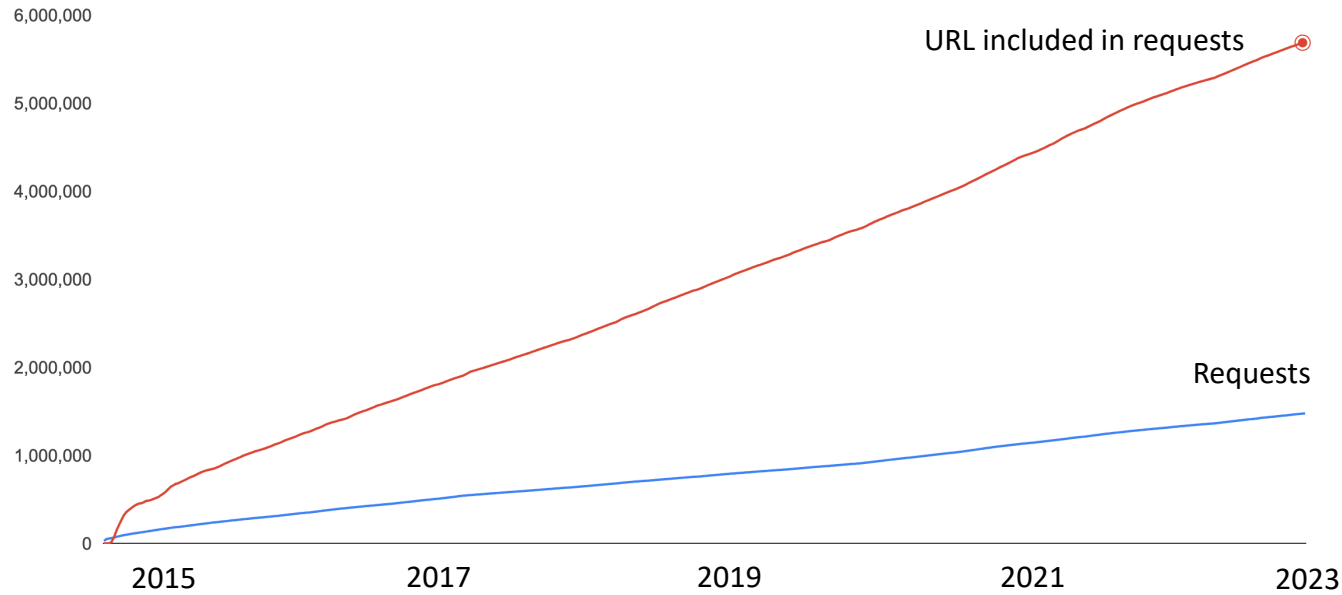
The total number of "right to be forgotten" requests submitted to Google and Bing between 2015 and 2021



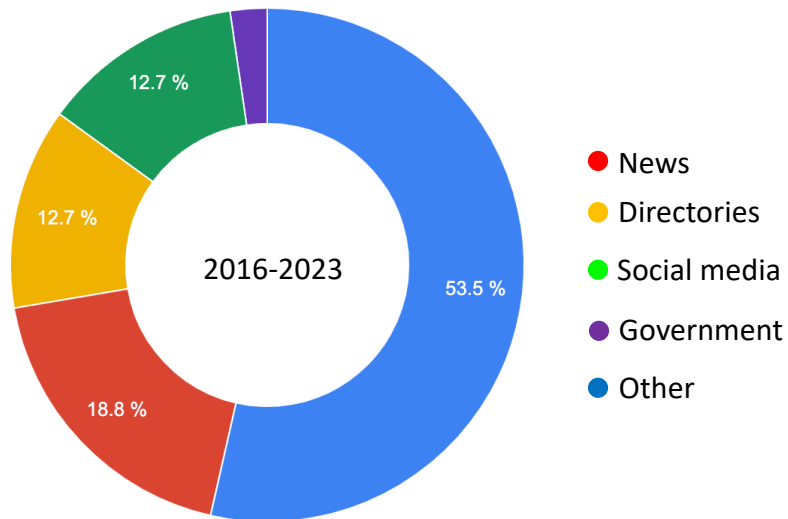
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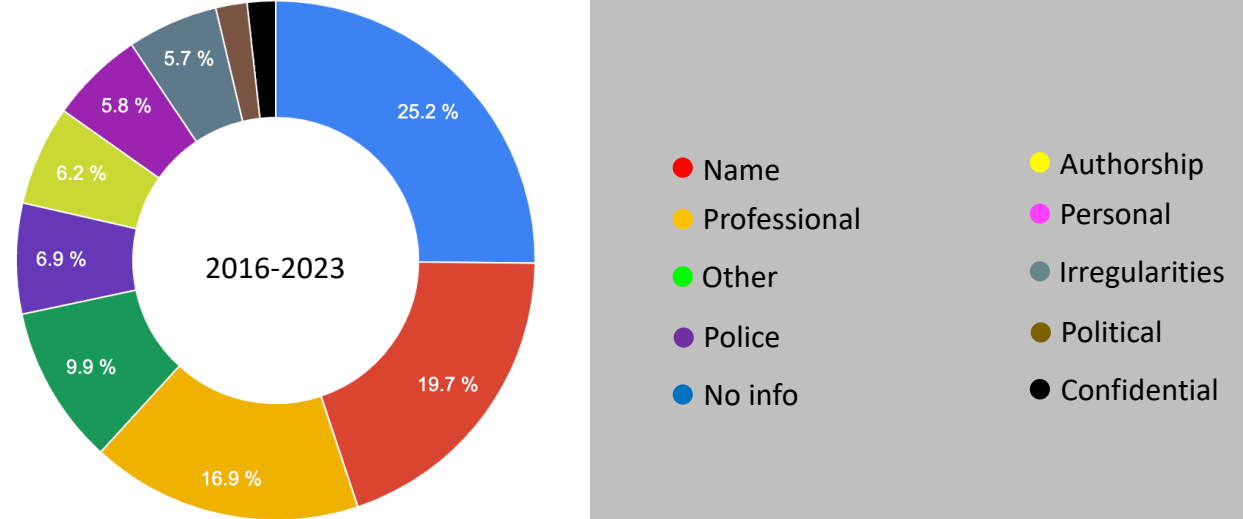
Opportunities and challenges of the digital matrix: Google transparency



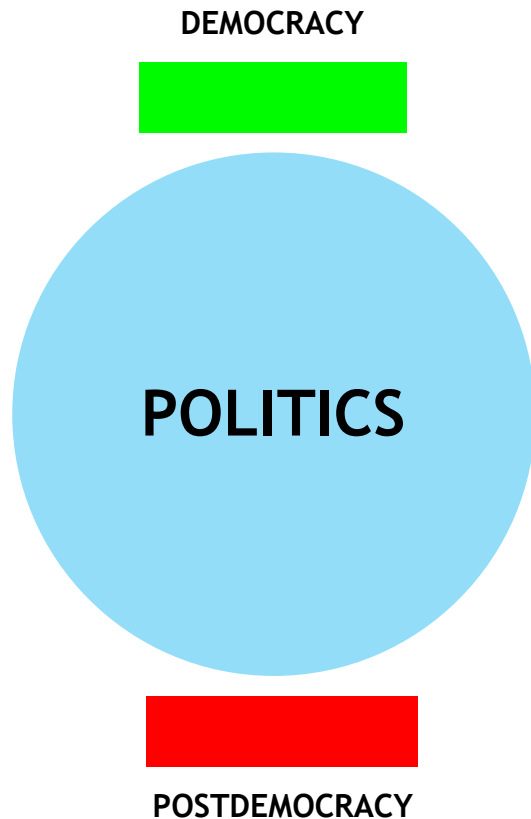
Websites categories with elimination requests



Type of elimination requests



Opportunities and challenges of the digital matrix: politics



Definition

Knowledge has always been relevant to politics. We may agree that the very foundation of the nation-state does not rely on violence – which is only applied in particular cases– but on data and the possibility of representation.

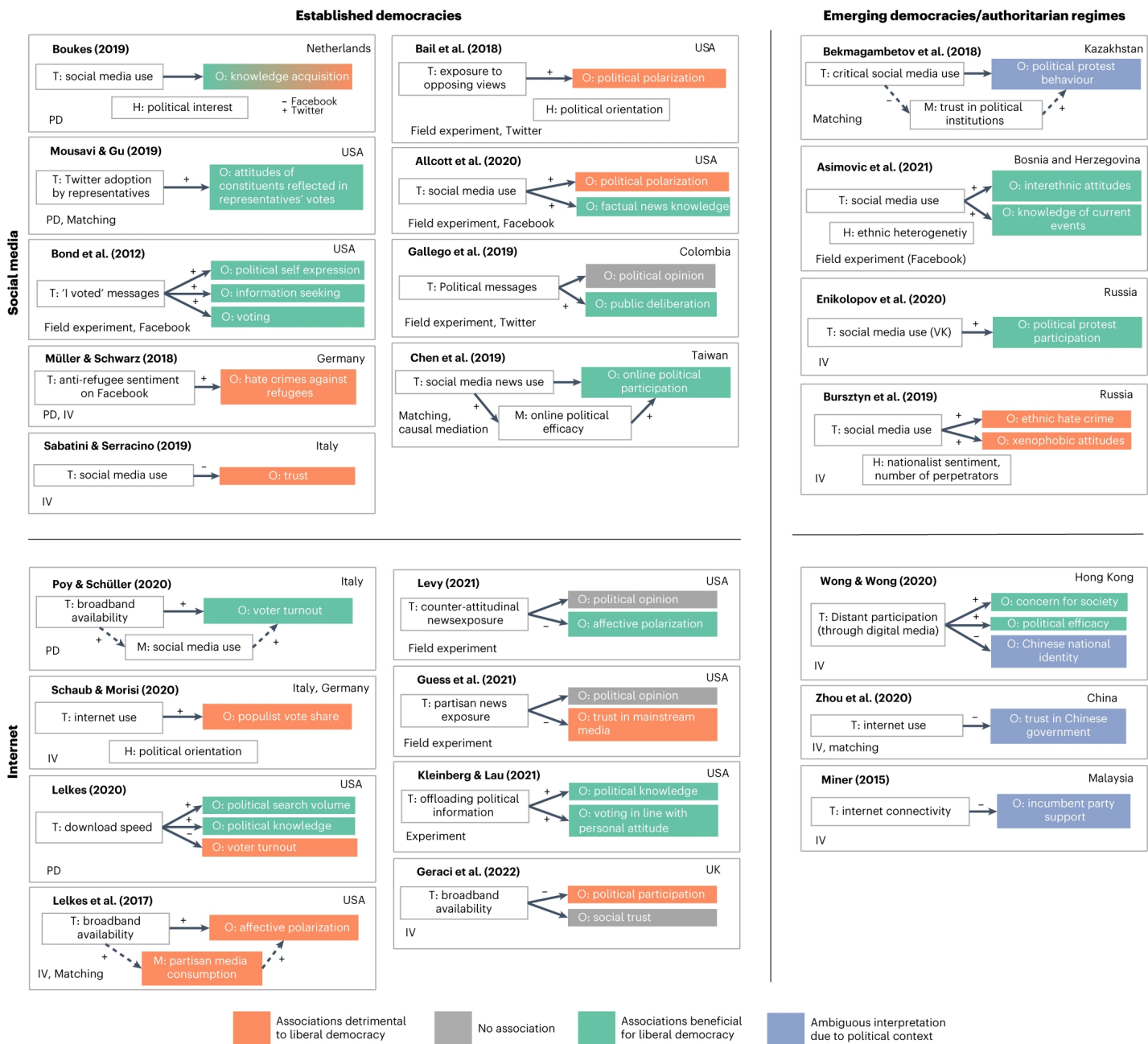
Challenge

With digital social networks in democratic contexts, politics loses its capacity for top-down communication and, therefore, its capacity for representation and intermediation of interests between the public and the administration. **Political parties renounce their doctrines and become a platform for particularism** – non-knowledge based politics, identity politics, post-democracy.

Opportunity

Today, we have a wonderful opportunity to supplement our knowledge through artificial intelligence, to identify the biases in our datasets, and to train efficient algorithms that do not reproduce human stupidity with artificial stupidity.

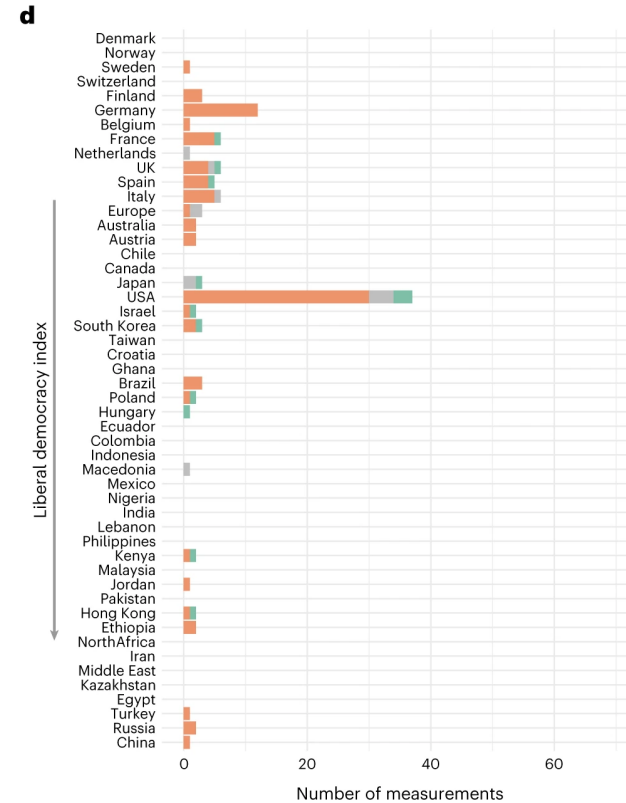
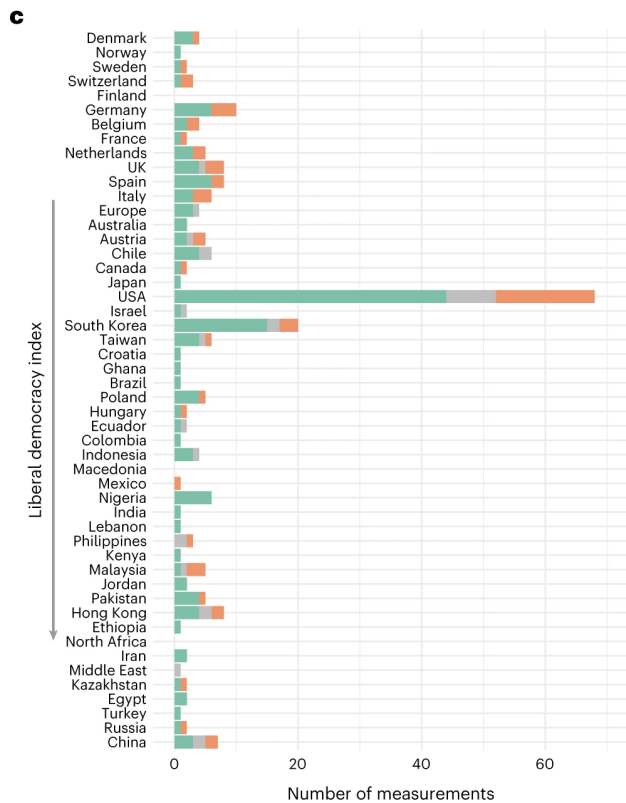
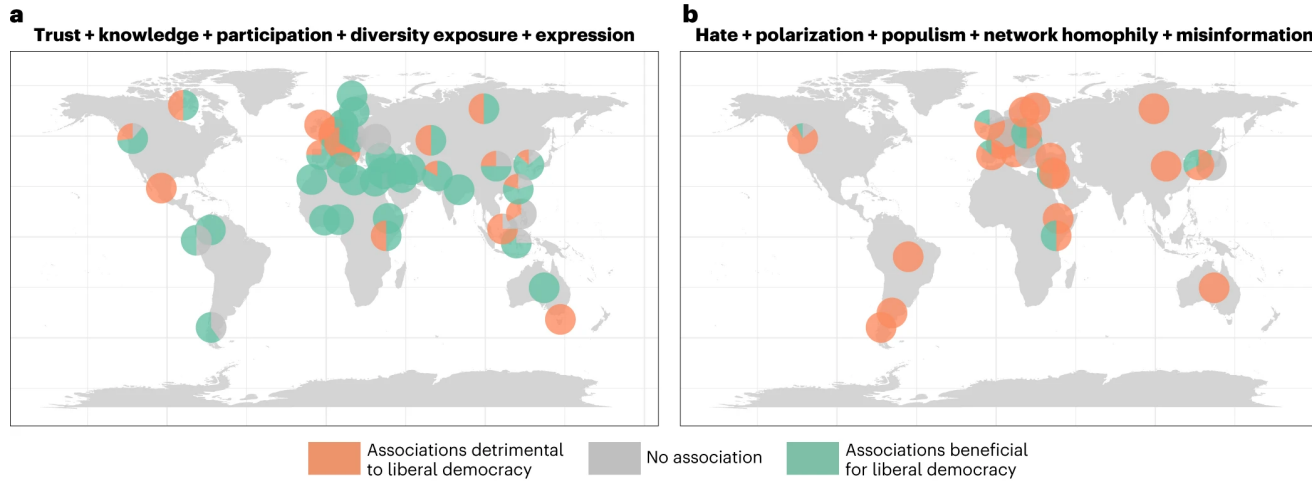
Digital associations: detrimental and beneficial for liberal democracy



Lorenz-Spreen, P., Oswald, L., Lewandowsky, S. *et al.* (2022). A systematic review of worldwide causal and correlational evidence on digital media and democracy. *Nature Human Behavior* 7, 74–101. <https://doi.org/10.1038/s41562-022-01460-1>

Source: <https://www.nature.com/articles/s41562-022-01460-1>

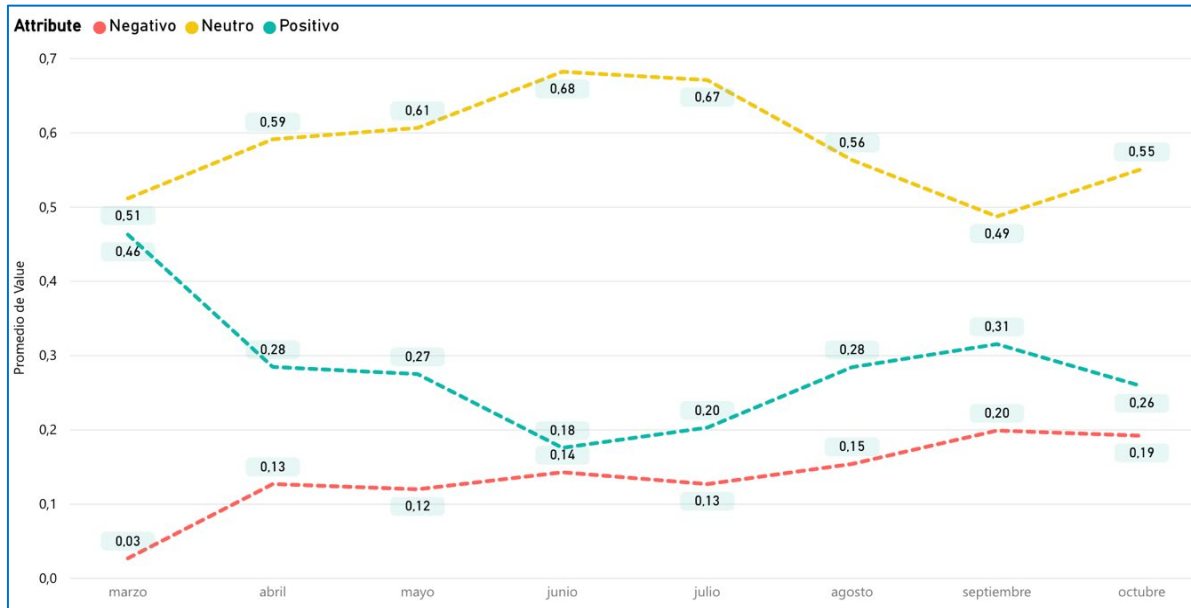
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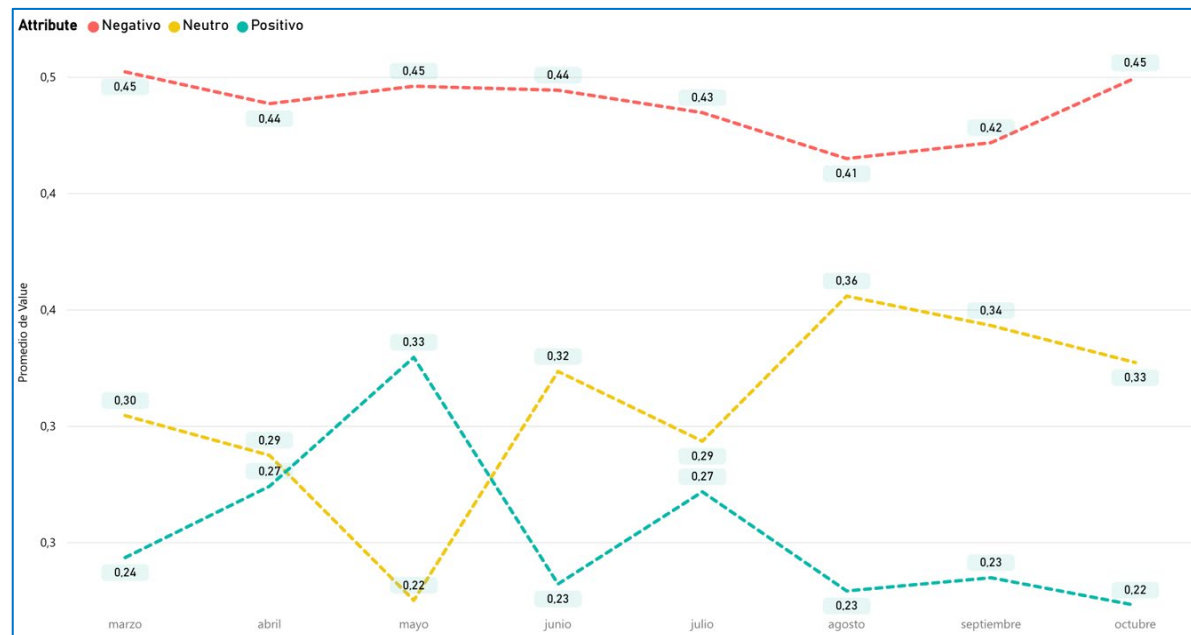
Negative sentiments: official vs members' communications



Official networks: neutral + positive

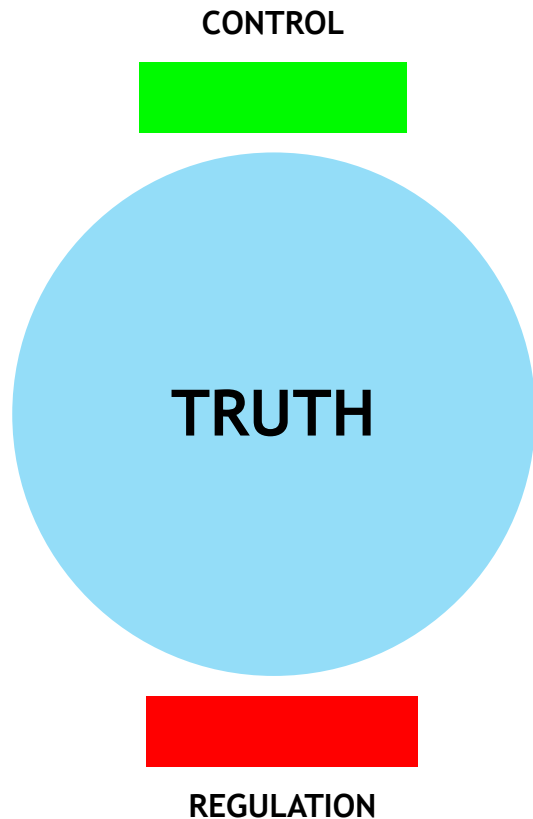
Sentiments in social networks Partido de la Gente - Chile

Source: <https://www.cepchile.cl/investigacion/partido-de-la-gente-la-construccion-del-individualismo-posdemocratico/>



Member networks: negative

Opportunities and challenges of the digital matrix: truth



Definition

The expression “fake news” is just a manifestation of an ignorance gap between the well-known conditions of our daily experience as individuals and the world as a whole

Challenge

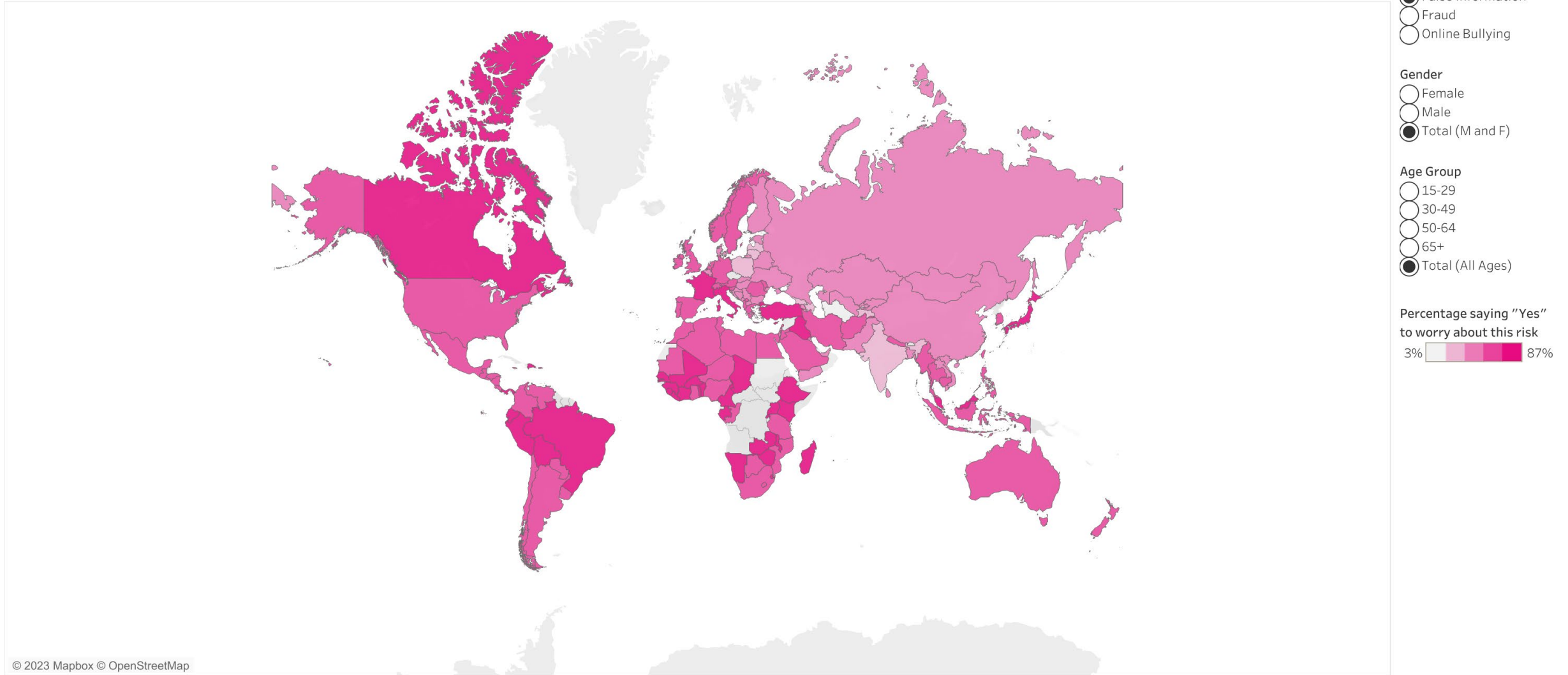
- State inability to understand how AI systems and social networks work --- Ignorance increases bureaucratic control.
- Training with past data hides possible discrimination --- bias.
- Use of subliminal behavioral control techniques, vulnerabilities, biometric identifications, and classification of persons with undetermined consequences.
- *None to trust* --- lack of trust and confidence in society.

Opportunity

The legal provisions must be based on the risk approach applied to AI and social networks: unacceptable, high, and minimum acceptable risks. Regulation should include an iterative risk management system, with permanent updating and special consideration of technical knowledge, experience, and user training.

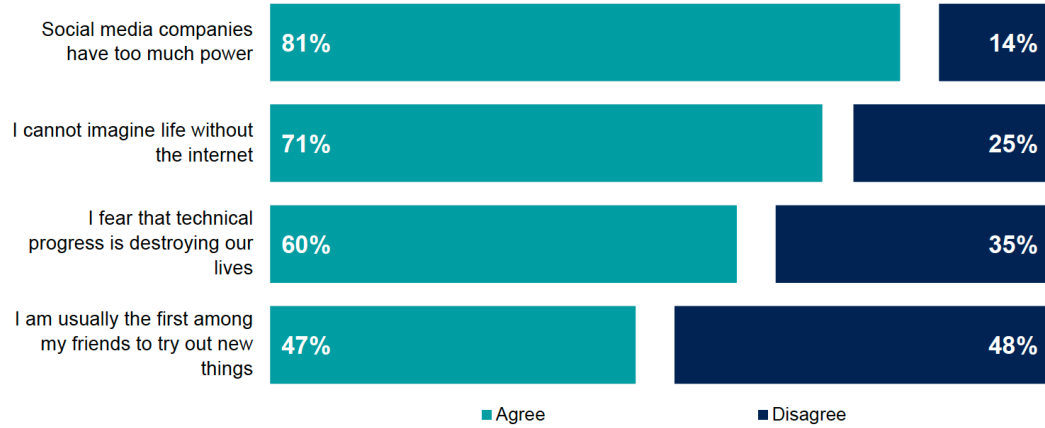
'False information' pool - worldwide

Cyber Risk by country, age group, and gender - use menu to select what you see, hover mouse over country for data.



Social media companies have too much power vs life without the Internet

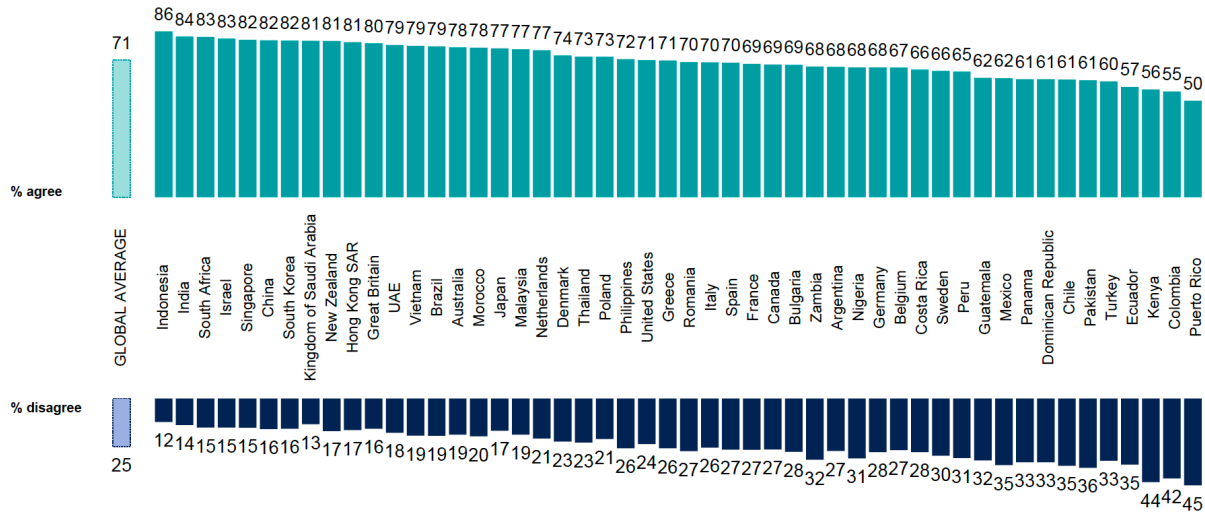
To what extent do you agree or disagree with the following statements?
% agree



Base:
48,579 adults aged 16–75 across 50 markets, interviewed online between 23 September and 14 November 2022

To what extent do you agree or disagree with the following statement?

I cannot imagine life without the internet



Base:
48,579 adults aged 16–75 across 50 markets, interviewed online between 23 September and 14 November 2022

Source:
Ipsos Global Trends 2023

IPSOS Global Trends 2023

Source: <https://www.ipsos.com/en/global-trends>

Conclusions

While the printing press produced a symbolic differentiation that led to the emergence of modern society, digital communication has just begun transforming society.

With the expansion of digital communication and the differentiation of modern society, the production of both specialized knowledge and ignorance about the complex consequences of interdependence increases. Society becomes unpredictable.

Instead of predicting future dystopias, the risk approach is more useful. The question is not when there will be a generative AI –we already have GPT4–, but what is the minimum level of risk we can accept in dealing with social media and artificial intelligence.

Tensions between challenges and opportunities

Right to erasure vs privacy

Crisis of representation vs post-democracy

Truth vs control