



Task Force 05

INCLUSIVE DIGITAL TRANSFORMATION

Preventive Cognitive Contagion as a Strategy for Mitigating Electoral Misinformation

Luiz Eugenio Scarpino Junior, Professor, University of Ribeirão Preto (Brazil) and Sophia University (Italy).

Nicole Medeiros Guimarães, Researcher, University of Ribeirão Preto and University of São Paulo (Brazil)



TF05

Abstract

The difficulty in correcting misinformation, a post-truth, is tremendous. Its effects are highly enduring, even after retractions, as the effectiveness of the correction depends on factors involving warnings during exposure to misinformation, repetition of retractions, and correction through a coherent alternative narrative (Lewandowsky et. al. 2012). Considering the vast amount of data posted and the dynamism of information transmitted via digital channels, legal measures available in Brazil have not been successful in protecting the truthfulness of news disseminated on the internet. There is a need for an enforcement of the establishment of rules that address the core issues. The effects of misinformation persist in people's reasoning, bringing about a phenomenon known as "continued influence" (Ecker, Lewandowsky, Cook,. et al. 2022). One key to overcoming misinformation would be healthy skepticism or induced distrust regarding people's attitudes towards questioning the origins of misinformation, making the revelation of falsehood more readily accepted (Lewandowsky 2012). One possible strategy would be to promote defensive cognitive contagion (Cowen et. al. 2022), adopting the effects of dissonance and exposure with the cognitive cascade model, which captures the spread of identity-related beliefs through the sharing of messages by so-called "super-spreaders," individuals with significant media exposure. This strategy would focus on correcting misinformation and conspiracy theories that permeate the population, rather than just the network in which they are embedded. It would be a kind of counter-propaganda to "inoculate" network users, preparing them to encounter misinformation and yet not rely on it. It is understood that platforms have a duty of diligence to facilitate such preventive strategies, which can be adopted as one of the forms of mitigation in the realm of electoral misinformation.

Keywords: Electoral Misinformation. Inoculation. Preventive cognitive contagion

Diagnosis of the Issue



Among the objectives and priorities of the G20 Brazil agenda, particularly ensuring inclusivity and ethical considerations regarding "Digital Economy," there is a recognized need for investment in research and development in the digital sphere, notably to improve the integrity of information. The presented proposal involves initiatives aimed at enhancing the available digital tools to facilitate the dissemination of reality-based information, promote digital education, and mitigate disinformation.

A key priority for Brazil during its G20 presidency is the reduction of inequalities. In this context, making the population less vulnerable to manipulation attempts through disinformation can be an important tool in fostering an environment conducive to the transparent circulation of information, "for the benefit of online cultural diversity and fair access to content for all" (UNESCO, 2022). It is important to highlight that, in the political-electoral arena, the manipulation of public opinion through disinformation is often possible through strategies involving the abuse of economic power by agents directly interested in the election outcomes. Therefore, increasing connectivity and reducing the disparity in access to integral information among people must be globally achieved objectives—here constituting another axis of G20 Brazil targeting Global Governance, but adapted to each regional reality. Thus, educating the population to identify and resist disinformation aims to reduce the impact of this manipulation, funded by agents whose intentions are to maintain the economic interests of the wealthiest segment of the population.

Democracies across the globe are facing imminent threats. Even historically stable democracies are impacted by post-truth effects. Electoral processes can lead to social upheaval, especially when marked not just by polarization but by heightened political

radicalization. This division fosters group dynamics where identification and adherence strengthen through the election of a common enemy.

Mass manipulation, scientifically planned, has become a strategy in psychological warfare aimed initially at consumers and later, for political purposes, shaping the design of contemporary political-electoral campaigns.

In the context of the digital communication era, where information spreads rapidly, reaching a significant number of individuals, electoral campaign strategies frequently rely on misinformation. This aims to discredit certain candidates and favor others, potentially causing detrimental effects to the importance of informed voting for choosing representatives and leaders genuinely committed to the "common good."

In the current era of postmodernity, profound social changes due to COVID-19 restrictions are evident, particularly in prolonged limitations on face-to-face interpersonal contact. This has shifted the establishment of connections, peer communication, and information acquisition, work, and education from in-person to digital realms, with persistent trends such as the rise of "digital nomads," app-mediated relationships, and distance learning.

In this context, the spread of misinformation as a strategy in electoral campaigns finds fertile ground. It's a carefully planned strategy, specifically targeted at the intended audience (microtargeting, whenever enabled by platforms or data stratification), creating a semblance of credibility for false information, making it appear true through repetitive and mass sharing via digital channels.

The considerable refinement and enhancement of these practices exponentially amplified by advancements in artificial intelligence allows for greater effectiveness of fake news, especially when perpetrated in the face of psychological phenomena. These involve individual and group tendencies to believe in certain content and reject others,

regardless of rational evidence demonstrating their falsehood, such as cognitive dissonance and confirmation bias.

This is a complex and multidimensional phenomenon, highly prevalent in current political campaigns across various regions of the world. There are serious risks that misinformation could lead to misguided stances by future administrators. In some cases, sectors have gone beyond mere declarations, using the abuse of administrative power to punish their critics.

Thus, combating misinformation in the electoral sphere requires more than just the adoption of repressive measures. It is observed that the right to reply or the removal of fake content does not guarantee the restoration of the status quo ante. It is necessary to develop other preventive and educational strategies that can provide greater protection to voters against campaign strategies based on fake news.

In this context, various tools aimed at media literacy have been encouraged, particularly in Europe, where the tactic of inoculation is part of the rules to be applied for the European Parliament elections in 2024 (refer to proposal 16, "b", ii, in the proposal submitted – Consultation 2024).

Such strategies aim to cultivate in voters a kind of healthy skepticism or induced distrust, equipping them with knowledge and tools to more easily identify fake news and discredit it when exposed to it. The proposal involves leveraging the predominantly digital nature of information consumption by voters to develop more effective means of combating the spread of fake news. This includes tools known as prebunking or defensive cognitive contagion, which, while still relatively new and requiring more comprehensive studies, show promising results. Encouraging their use as a form of prevention and combating fake news reduces the population's vulnerability to misinformation in the electoral context.

Recommendations

It is possible that not all of these recommendations are directly applicable, with some level of adaptation for each G20 member state, which must take into account their cultural, political and social contexts in order to achieve their objectives; nevertheless, based on the principles of fundamental human rights.

The intervention model to be developed must necessarily be based on previous exploratory studies, aiming to understand the reality of each country and culture, especially regarding their digital content consumption habits and internet access, as well as the particular issues they face concerning disinformation in electoral contexts. This step will enable the design of a preventive cognitive contagion policy to be tailored individually for each country, rather than based on a single model, considering the specific characteristics of each region.

We believe it is essential to comply with the UNESCO Guidelines 2023, specifically on the following point:

26. States should respect and promote human rights, including the right to freedom of expression and the right to access information. Restrictions on freedom of expression are permissible only under the conditions established by Articles 19 (3) and 20 of the ICCPR. States have positive obligations to protect human rights against unjustified interferences by private actors, including digital platforms, as they have the responsibility to create a regulatory environment that facilitates platforms' respect for human rights, and to provide guidance to the digital platforms on their responsibilities.

Recommend to each of the G-20 member states to establish interchange of good practices and experiences, with the appropriate caveats, the following measures as guidelines:

1. Compelling “big techs” to provide the information they collect from their users, which allows for the development of specific educational tools for groups vulnerable to fake news, is essential. The same algorithmic metrics used to recognize groups and associate content with the “filter bubble” profile should be adopted for inoculation tactics, considering the domestic structure related to data protection policy, in particular to protect the most vulnerable, as well as only using the same algorithms that are now recognized as sufficiently secure, for example, to be used in personalized ads, always with transparency based on the free consent of users.

1.1. Therefore, it is necessary to map the main big tech companies associated with information search and networking by the local population (Grassi e Ruediger 2023). This will allow for the identification of more specific targets for implementing measures outlined for this purpose. It is important to recognize the vulnerability, including socio-economic vulnerability, of the population to these Very Large Online Platforms and Search Engines.

2. Encouraging initiatives for research and development of digital tools (such as games, videos, short texts, images, comics) is crucial. These tools can help voters understand how fake news is produced and disseminated. Thus, when voters encounter attempts to spread misinformation, they can doubt or discredit them.

3. Investing in scientific research to evaluate the topic, with a transdisciplinary approach involving cognitive psychology, sociology, anthropology, law, economics, data science, etc., is essential. This will allow for mapping the main nodal points used for electoral misinformation and simultaneously assessing, within the target audience, what kind of content is accessible to enable the inoculation of such individuals.

4. Establishing a network involving civil society organizations, universities, think tanks, at regional, national, and global levels is crucial. This network would facilitate the exchange of experiences and best practices that can be adopted to mitigate the effects of misinformation.

5. Establishment of an integrated public policy, involving both public and private actors, aimed at a system of mapping and digital surveillance regarding misinformation practices and strategies present in the reality of each locality, for their rapid identification and neutralization.

6. Encourage influencers to disseminate practices of inoculation or preventive cognitive contagion, enabling other users to access content through individuals they trust, which may raise awareness about encountering misinformation, aiming to mitigate the persistence of fake credibility.

Scenario of Outcomes

The proposal for implementing prebunking or defensive cognitive contagion as an effective educational strategy for voters entails finding the following trade-offs:

- It is possible that not all G20 countries are aware of or understand the importance of establishing guidelines for good practices in guaranteeing information integrity, including the adoption of specific and preventive measures such as the one suggested here. To this end, it is important to highlight the need to establish global governance that can guarantee a more transparent and respectful environment for all, because “we need to develop consistent responses around the world, and avoid fragmentation of regulations or approaches that compromise human rights” (Unesco, 2023), including privacy.

- It is not clear that governments support investment measures, research or actions to guarantee and empower the most vulnerable section of the population, especially in digital education.

- It is possible that governments with authoritarian tendencies will reinforce disinformation initiatives in order to consolidate their hold on power and thus undermine civil society's efforts to counter big tech.

- The market power of big techs should also be considered an obstacle to establishing such prevention policies, if it doesn't come from legal enforcement or a global movement that directs such actions.

- Freedom of expression and privacy can be mobilized as a form of resistance to adhering to these recommendations by some countries, especially if they do not consider the limits set for guaranteeing fundamental human rights. The instrumentalization of the freedom of expression discourse cannot override the need to protect the rights of the most vulnerable and susceptible to the risks of disinformation, so that they are free from

manipulation in the free exercise of their citizenship. That's why we believe in recommending good global practices that can guide proper protection to allow the free circulation of ideas, guaranteeing the integrity of information.

- Considering the different cultural and political realities and yet the need to create more uniform indications, we recommend a creation of institutional safeguards by an authority (validated by civil society or an independent council) to prevent authoritarian alignment or the misuse of power , especially to ensure that prebunking cannot be used as a tool for media control by state agents or the platforms themselves. Furthermore, for it to be more effective, the selection of this authority needs to be strategically planned to avoid association with one of the poles of the electoral dispute, requiring its impartiality and reliability to be recognized by the population as a whole. Otherwise, the chances of success of the proposal would be compromised, as it could be perceived as favoring the association of prebunking measures with electoral strategies of a specific party or coalition.

- This proposal has limitations in terms of its applicability and effectiveness, as can be seen in the following study conducted in Brazil in recent times (Grassi e Ruediger 2023), which demonstrated that approximately 29% of the population interested in political topics on social media tends to downplay the harmfulness of misinformation, not recognizing its severity or its potential for harm. It is also relevant to note that this audience tends to share misinformation more frequently, contributing to its dissemination. This scenario portrays the enormous challenge at hand and indicates the limitations of strategies that solely aim at correcting or fact-checking information in the phenomenon of misinformation, once it has already reached and been assimilated by such a portion of the population. Therefore, there is a need for investment in preventive policies to seek, along with other concurrent measures, to change this scenario and reduce the impact of

fake news on electoral processes in the medium term. Even so, it is important that even with these limitations, these efforts are made to reach a large part of the population (approximately 70%).

- Further studies are needed to measure the effectiveness of the measures (as prescribed in Unesco, 2023, 7.c - advance evidence-based and human rights-based policy approaches), segmenting them by target audience and types of content, to ensure the perspective of mitigating, minimizing, or even reversing bias and breaking the "filter bubble" regarding psychological alienation towards belief in certain misinformation. It is important to recognize that this is a complex, multifactorial phenomenon of significant gravity, justifying institutional efforts to reduce its impact on democratic and electoral processes.

References

Consultation Guidelines for Providers of Very Large Online Platforms and Very Large Online Search Engines on the Mitigation of Systemic Risks for Electoral Processes.

2024. Shaping Europe’s digital future. European Union. <https://digital-strategy.ec.europa.eu/en/news/commission-gathering-views-draft-dsa-guidelines-election-integrity>.

Ecker, U.K.H., Lewandowsky, S., Cook, J. et al. “The psychological drivers of misinformation belief and its resistance to correction”. *Nat Rev Psychol* 1, 13–29 (2022). <https://www.nature.com/articles/s44159-021-00006> .

Grassi, Amaro e Ruediger,, Marco Aurelio. (coord.). 2023. Consumo de mídias digitais no Brasil: um mapeamento das dietas informacionais e dos usos de plataformas digitais no contexto nacional. Rio de Janeiro: FGV ECMI.

Jon Roozenbeek et. al., “Psychological inoculation improves resilience against misinformation on social media”. *Sci. Adv.*8,eabo6254(2022).

DOI:10.1126/sciadv.abo6254.

Lewandowski, Stephan; Ecker, Ullrich K.H.; Seifert, Collen MM., Scharz, Norbert, Cook, John. “Misinformation and Its Correction: Continued Influence and Successful Debiasing. *Psychological Science*”. *Public Interest* 13(3) 106–131, 2012, DOI: 10.1177/1529100612451018.

Scarpino Jr., Luiz Eugenio. 2024. Democracia e Fake News: Engenharia Constitucional e a resiliência institucional brasileira. Belo Horizonte: D’Plácido.

Traberg, C. S., Roozenbeek, J., & Van der Linden, S. (2022). “Psychological Inoculation against Misinformation: Current Evidence and Future Directions”. *The ANNALS of the American Academy of Political and Social Science*, 700(1), 136-151.

<https://doi.org/10.1177/00027162221087936>.

UNESCO. 2022. UNESCO World Conference on Cultural Policies and Sustainable Development – MONDIACULT 2022 – Final Declaration.

https://www.unesco.org/sites/default/files/medias/fichiers/2022/10/6.MONDIACULT_EN_DRAFT%20FINAL%20DECLARATION_FINAL_1.pdf.

UNESCO. 2023. Guidelines for the Governance of Digital Platforms: Safeguarding freedom of expression and access to information through a multistakeholder approach.

<https://unesdoc.unesco.org/ark:/48223/pf0000387339>.



Let's **rethink** the world

