Scientific Journal of Applied Social and Clinical Science

COMBATING
MISINFORMATION
IN THE ACADEMIC
AND PROFESSIONAL
SPHERES: PREBUNKING AND
EDUCATIONAL
COMMUNICATION
ARRANGING SOLUTIONS
AROUND THE 2030
AGENDA

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Abstract: The objective of this text is to present a study in progress on some strategies planned within the scope of ``Universidade Uberlândia``, Federal de which, partnership with the Universidade Federal Fluminense and ``Rede Conecta`` to combat Disinformation, develops a Pre-bunking programmatic scheme. Based on the state of the art already available on the subject, the study gives priority to a focus that combines academic and professional interventions, in the effort to produce instructional material whose purpose is to mitigate the perverse effects of false or misleading content on young people, especially high school students in the public education system. In addition to the theoretical aspects that specifically address "vaccine" research and materials to prevent these contents, there is a series of interventionist actions underway, carried out in university extension form, some of which are briefly described in this paper.

Keywords: pre-bunking; disinformation; 2030 agenda; educommunication; PET (Tutorial Education Program).

INTRODUCTION

The current actions of the federal government, journalism and civil society to combat disinformation reflect how society may be negatively affected by the spread of semantic constructions (here treated as narratives) intensified by digital ideological whose articulations do guerrillas, contribute or for peace, nor for a healthy debate on issues such as politics, customs and public health. The reduction in vaccination of children and as a consequence the return of diseases previously considered eradicated, such as polio, is one of the consequences of an anti-science movement "sponsored" by mistaken versions (or narratives) about the effects of the vaccine, which was already

a issue prior to the COVID-19 pandemic, but which, since then, has grown in size and importance due to the irradiation of sequential disinformation campaigns against vaccination. Likewise, other issues relating to the immediate or future well-being of the population have suffered increasingly ideologized attacks, among which issues relating to global warming and several related to fundamental human rights also stand out, especially those that highlight values and customs of the conservative agenda. In order to implement a didactic criterion for selecting which topics to prioritize in the development of an interventionist praxeological action to combat disinformation, the sustainable development objectives (SDGs) encouraged by the 2030 Agenda of the United Nations (UN) were taken as indicators), recommended in 2015 at the Paris convention.

Due to so many controversies, notably since extremely conservative groups have ascended to important social roles, the subjectivity of the actors, enhanced by the ease of peer-to-peer communication, has caused an unprecedented dissemination of information assembled, distorted or simply invented, to echo to a contradictory voice that was long repressed in the expression of social values, but which was built on the back of political inflation and intolerance to diversity. This theme, therefore, is the basis of reflection that sets in motion a research project whose concrete object is a media education action to equip communication and pedagogy students, and also high school students, to use techniques for detection and checking disinformation, in the foreground; but also develop, in the background, inoculation strategies (here called Pre-bunking) on how the ideological manipulation gear imposes itself, what distortion mechanisms they use and how it is possible to "immunize" themselves from misleading content.

This is a praxeological research1, which takes instruments and experimentation tools from the University to 'extra-mural' educational environments emerging issues on the 2030 agenda, such as the application of specific games (such as Go Viral and Bad News, in Portuguese versions), dialogical dynamics, with OSINT (Open Source Intelligence) as support, and debates held in conversation circles about disinformation and the post-truth context, including discussions about its contemporary social impacts developments. Compilations political data necessary to substantiate the initial and final assumptions are also being carried out, including those that situate the concepts addressed in the substantiation, as well as the use of studies organized by entities recognized for their contributions on the topic, such as: The Trust Project e First Draft.

THEORETICAL FOUNDATION

The press has a preponderant role in scheduling the public sphere; but when it comes to the subject of disinformation, most of the main communication organizations tend to carry out the same task: checking the veracity of possibly false or distorted content and disseminating, through the web, contradictory notes to the circulating misleading message. Thus, they lose in repercussion, considering volume and that the sharing of misinformation, due to its appeal and adherence to convictions, emotions and feelings, is more adjustable to ideologically equipped confirmation bias than to refutations - whose formats are not suitable for mass propagation, mainly because they are extensive in their argumentative content. So, one of the assumptions of the ongoing research is that it is not enough for large press vehicles to fact-check dubious, false or misleading

content, but rather that it is also necessary to strategically reflect such investigations, and that, despite all the work involved in the investigation, the naked disclosure of the contradictory is not enough to dismantle the opinion manipulation mechanism, especially in relation to the audiences most vulnerable to the influence of these contents, such as the case of the young target audience of the proposed experiment.

The extensive bibliography and epistemological parameters for the formation of an active reception, such as those treated by the Latin American School of Communication, notably represented by Jesus Martin-Barbero, Mario Kaplun, Guilhermo Orozco and Luiz Beltrão, have strongly influenced the media literacy circuit proposed since the last 30 years, inspired by Paulo Freire's pedagogy of autonomy. However, current discussions between academics, professionals and agents who work in civil society organizations realize that a critical eye and literacy for critical reading of media and messages are no longer sufficient, because, in the intricacies of posttruth, in addition to opinions matter more than facts, they now become target algorithms of the political economy of attention (as defined by Christian Fuchs, 2014) - the great business model of digital platforms, triggering a densification of stimuli and suggestions based on more of the same (beliefs and convictions), preventing a broadening of perspectives, visions and possibilities for considering what is received, what is stimulated, and perhaps, guiding not only what to think, but also how to act.

Thus, to organize a more advanced flow to combat disinformation campaigns, more than a functional appropriation of the checks carried out by fact-checking agencies, and in addition to encouraging critical reading of the media, the most current guidelines suggest

1. Method that seeks to understand human actions and the factors that lead them to perform certain actions to achieve their purposes. The roots of (Polish) etymology go back to the "general theory of effective activity" (ABBAGNANO, 2007, p.922)

a methodology known as Pre-bunking; whose function is a kind of "psychological inoculation" (ROOZENBEEK; VAN DER LINDEN, 2021) as a precautionary instrument against possible informational disorders. The very concept of informational disorder collides, to a certain extent, with what common sense defines as Fake news, having as justification the maxim that, if it is News (news) it cannot be Fake (false), assuming, as a consequence, the axis of concepts best defined as disinformation (which is that created deliberately to harm a person, social group, organization or country). In the English language, there are differences, albeit subtle, about how disinformation is constructed, whether by wrong information or misinformation, the first being that based on reality, used to inflict damage on a person, social group, organization or country, which the distinguishes it from the second form (which is admitted as false, but not created with the intention of causing harm); even though both result, in any case, in distortions of reality.

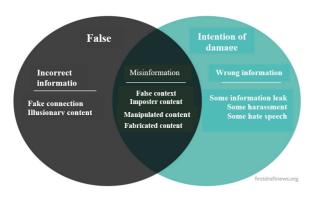


Figure 1: Information disorder

DEFINING PRE-BUNKING IN THE OPEN VEIN OF LATIN AMERICA

The definition of the word (in English) "debunking" means to discredit, unmask. This is one of the main tasks carried out by fact-checking organizations, whether or not linked to communication companies, which are responsible for investigating rumors and misleading content. ², in whole or in part. The fact-checking activity, appropriated by large press vehicles, checks and determines information regarding dubious, false or misleading content that circulates on the internet and through peer-to-peer messaging applications.

However, the dissemination and repercussion of this information does not reach the impact of the false content spread across the network, which suggests that, despite all the work involved in the investigation, the naked disclosure of the contradiction is not enough to dismantle the mechanism of manipulation of opinions, especially in relation to audiences most vulnerable to the influence of such content.

The limitations achieved by the old models of media literacy, such as the incentives for Critical Reading of Communication (a strategy that was pioneered in Brazil by the CNBB - National Confederation of Bishops of Brazil) and all the current struggles promoted by organized civil society collectives They have not yet found a way to promote listening to audiences that are resistant to scientific, progressive and human rights agendas in their entirety. But while a possible term for penetration and change in latent or manifest not clearly identifiable, dispositions is awareness-raising projects are carried out by organizations around the world.

An example is the instructional material organized and made available by the United

^{2.} Throughout this paper there is a certain care in avoiding terms such as "fake news", or "fake news", with the purpose of echoing and agreeing with the assumption that, if it is news, it cannot be false, if the main references of professional journalism. False information is an admissible term, due to the broad chain of concepts that cover the meaning of information.

Kingdom Government, which deals, among its strategies, with Pre-bunking, through a toolkit called RESIST 2. In one of its sections, called "Strategic Communication", the content presented lists a list of good practice principles, from the OECD, for Public Communication responses to disinformation.

The principles listed are: transparency, inclusion, responsiveness, society as a whole, communication guided by the public interest, institutionalized and evidence-based interventions, punctuality in their mechanisms, prepared by anticipating evolution, and, finally, focusing on prevention. Prevention is not, from the point of view of the order of appearance in the session, the last listed, but we indicate it last in our enumeration, because it concerns the priority aspect to which this discussion focuses.

Thus, the prevention principle covered by the toolkit indicates, textually, that:

Government interventions are designed to prevent rumors, falsehoods, and conspiracies to prevent potentially harmful information from gaining traction. The focus on prevention requires governments to identify, monitor and track problematic content and its sources; proactively recognize and fill information and data gaps to reduce susceptibility to speculation and rumors; understand and anticipate common disinformation tactics, vulnerabilities, and risks; and identify appropriate responses, such as "pre-bunking" (RESIST 2, 2022)

Obviously, it is necessary to point out, or even consider, that a tactic recommended for government actions – in this case, public communication – cannot simply be transported to the forum of individual agency in the reception of information. However, the discussion about the lato sensu nature of this type of tactic is of great interest to the proposal of raising awareness among individuals to combat disinformation, when we interpret the differences and repetitions of contexts within

Brazil.

In other words, maintaining the appropriate proportions and differences, both government communication and communication managed by the subject himself can use protective and preventive measures in relation to common susceptibilities, vulnerabilities and risks caused by disinformation. And although the United Kingdom has had a conservative government at its head since before its departure from the European Union, it has shown some concern regarding public opinion about the impacts and burdens caused by Brexit, so it is not surprising that there is a instructional material exclusively prepared to combat disinformation, (the latest edition of which dates from 2022) since many disinformation campaigns, before and after Brexit, affected and still affect the way the British position themselves.

Thus, the RESIST 2 publication for government communication not only identifies the tactic of "Pre-bunking" as a proactive protection measure, but also discusses the meaning of "pre-bunk" as something like a type of "proactive neutralization".

Preventive filtering tactic, simulation of a false scenario immediately refuted with the aim of prevention, warnings about manipulation hypotheses; There are many ways to understand what to expect from Pre-bunking, however, even in the RESIST 2 document, reference is made to terms that have been strongly incorporated in Brazil, such as "inoculation" or "vaccination" against disinformation.

Along the same line of reasoning, recent studies update what has been called "Inoculation Theory" for more than 50 years, (COMPTON, VAN DER LINDEN, COOK, BASO, 2021) "which seeks to explain how immunity to anti-attitudinal messages is conferred by preemptively exposing people to small doses of challenging information." 3,

^{3.} Translated by the Google Translate application and reviewed by the author.

as rhetorical narratives, such as those used in political debates; or as persuasive pressure to force counter-trend behaviors, such as encouraging smoking.

In the Toolkit "pre-bunk" in the context of public communication is expressed using the following recommendation: "anticipate misinformation and disinformation through media monitoring and risk assessment and prepare to pre-emptively alert the public" (RESIST 2, 2022, s/p).

Forms of raising awareness through communications aimed at a collective or a larger audience will also be important for the ongoing project, such as those presented by the RESIST 2 toolkit. Drawing a parallel with "vaccination" through pharmaceuticals, it is possible to build an efficient tool with inoculation strategies aimed at large audiences, in what was known in the past as "herd immunization", and which are currently called "mass immunization".

However, the discussion on how to reach this level involves strategies that range from the creation of complementary public policies for civic innovation (such as political education projects) to inspection and monitoring by civil society and Union powers to demand mediation platforms. more overt moderation of public debate in the digital arena; transparency in the criteria for suggesting content and repression and punishment for false content that puts lives and rights at risk, including incitement to violence. The point is that these are controversial discussions because they involve approaches to freedoms and preservation of rights (copyright, for example), whose positions divide opinions.

In the case of the programmatic scheme implemented by our project, whose journey is just beginning, the team is still focusing on how to create Pre-bunking tactics to be implemented person-by-person. The ways of raising awareness will depend more on the efficiency of the action to be implemented than on the number of audiences to be reached. Thus, measures suggested by the toolkit as counter to previously elaborated narratives, within the scope of analysis by the O2PAD Research Group (Public Opinion Observatory in the Digital Arena) are not as efficient in the forum of individual agencies, as they encounter resistance in their echo chamber. Piercing the bubbles and understanding how to reduce this resistance are part of the challenges to be overcome by the partnership groups involved in this Project.

Playful activities such as gamification, quizzes and dynamics with memes are media literacy tools that can be used as options to reinforce resilience in the scope of proactive communication, allowing these actions to implement the inoculation strategy. The set of actions, tactics and attacks for the purposes mentioned above constitute a prebunking strategic communication to combat disinformation.

It is a fact that authors such as Altay, Berriche and Acerbi (2023) defend an extremely critical position in relation to the scale given to the spread of misinformation, addressing some "evidence" that the prevalence and impact of misinformation are increased, including the assumption that the influence of fake "news" on major sociopolitical events is exaggerated, using authors such as Guess et al. (2020). However, for most researchers in Brazil, who still consider the indicators regarding the volume of peer-to-peer communication in which this misinformation flows freely, in the exchange of messages via chat applications, such as WhatsApp or Telegram, to be nebulous, including mass shootings, it is possible that this premise does not hold, given examples such as the anti-democratic popular acts of January 8, 2023.

The mission of the project is, therefore, without losing sight of the global trends of

anti-scientific and denialist movements, to identify the needs, concerns and obstacles to expanding the discussion on the UN Sustainable Development Goals (SDGs), in its 169 goals, which are themselves already undergoing immediate review and expansion, and to investigate which themes are most emerging to guide the programmatic scheme in public schools.

Even though studies of the "reality-shock" type catch our attention, such as this one by Altay, Berriche and Acerbi (2023) on the limits of romanticization and thematic waves and fads, one thing is certain: what is reality in The United States may not be suitable for the Brazilian context. Unfortunately, the available bibliography includes very few studies originating in Latin America and the Caribbean, which gives even more responsibility to the Pre-bunking works created under our vein and our bias.

STRATEGIES ADOPTED FOR PRE-BUNKING AGENCY WITHIN THE SCOPE OF THE PROJECT

Going deeper into the actions and effects of Pre-bunking, in addition to providing the necessary background to support ongoing research, also helps to address the methodological options on which agents' interventions must be based. However, one of the biggest obstacles inherent to the work is the lack of knowledge about what these types of actions are. Whatever the presentation or request, as a rule, clarifications and indication of modeling are required, always in a didactic and illustrative manner, to enlist adherence, authorizations and collaborations and partnerships necessary for the ongoing project.

Therefore, the option to publish an instructional booklet as support material for

the agents' work was one of the first resources to be considered, despite the challenge of producing digital, interactive, responsive and intuitive consultation material.

Another major concern has been to simplify the definitions so that they can be understood by other multiplier agents, and once the programmatic scheme is complete, it can be available to be replicated by any interested party who has combating disinformation as a priority and wants to apply it to the ecosystem. dialogue in its area of responsibility – as well as in instances where knowledge circulates, such as pastoral, collective, athletic, NGOs, social projects, in short, any form of grouping – even if the original "pilot" format is being undertaken for young people between 13 and 18 years old.

Due to the priority of this age group, one of the most viable strategies for raising awareness, taking into account the themes defined as priorities, is the production of videos, both covering on-site actions, reporting the conception, engagement and project progression, as well as educational, containing guidelines, clues and recommendations on tools, means and processes through which it is possible to "immunize" yourself from misleading messages, "harmful" vehicles and disinformation campaigns.

These mediation strategies (digital booklet and videos) are resources, and the project establishes others whose character is training and dissemination. However, the more robust guidelines intertwined with the project show that continuous actions (research, awareness raising and extension) are the most appropriate strategies for profound results and transformation of the current state of affairs.

The value of partnerships is undeniable between academics and professionals, exchange between undergraduates and public

^{4.} It is necessary to recognize here the availability of partnership with the Consumption Rhetoric Research Group, from the ``Universidade Federal Fluminense``, led by Professor Dr. Guilherme Nery Atem, without which the progression and planning of the project would not have been possible in the way how it was.

education agents, between researchers from different universities and research groups. However, it is the transformations brought about by these different subjects that can result in significant interventions, not only with the construction of specific or localized solutions, but as protagonist actors in the permanent process of edification in favor of critical subjects who are aware of their roles in the cyclical chain of creative content industry. Therefore, the coordinators involved in this project understand that the actions of discussions and continued production of research and extension and its related intricacies are the most assertive strategies and those that can provide the most fruitful results in the medium and long term.

Thus, the arrangements made for each workshop offered as an extension course to undergraduate students; the premises addressed by/with invited experts on the best ways to approach the themes of the 2030 agenda in order to raise awareness of those impacted about the configurations of misinformation and even the dynamics carried out in conversation circles with high school students, involving teaching tools, such as games and simulators, each of these actions can yield much more from the point of view of how it reverberates a posteriori in each of these subjects, such as the improvement of individual contributions, than an expectation of immediate results due to the actions implemented for the project. Understanding, therefore, this perspective, as the continued formation of a mentality about the importance of building epistemic communities to fight for a more just, peaceful and "immunized" society from harmful campaigns of disaggregation and disinformation with respect to essential themes, such as those of the UN 2030 Agenda, but also those that shape the political atmosphere of the present time. Inoculation, therefore, begins, firstly, with the selfawareness of those involved in the project and the improvement of their objectives as participating subjects.

ONGOING CONSIDERATIONS

The report of the ongoing study takes into consideration, at least four initiatives that were created independently of each other, but which culminated in the Research Project called: "Network to combat misinformation in public schools: political education for the protection and projection of the 2030 Agenda". This project, the result of a partnership between the Conecta Network to Combat Disinformation and the O2PAD Research Group (Public Opinion Observatory in the Digital Arena), from ``Universidade Federal de Uberlândia``, calls for work, two other distinct proposals: 1) The implementation of the 2030 Agenda in universities, through actions (in the case of this project, extension) that help promote the UN's sustainable development goals (SDGs); 2) The tutorial education program of the UFU Faculty of Education (``PET-Educomunicação``), which carries out, every year, actions that promote critical reading of communication in public schools, within the UFU Program in schools. To combine both efforts, also considering that the proponent is simultaneously a member of the SDG Steering Committee at the University; and tutor at "PET Educomunicação", a set of actions was established that could be implemented as a transversal or complementary activity in secondary education in public schools, initially local, but which could later be replicated in any public school in the country. Thus, it was possible to develop a list of extension actions capable of having the themes of the 2030 agenda as priority agendas, but bringing as a priority the issue of the deformation of opinions articulated by disinformation campaigns.

Called a programmatic scheme, the set

of actions ranges from raising awareness, through conversation circles, to the recording of short-term audiovisual media, dealing with educational content, in the form of informative "pills" or "pitch". Rede Conecta, which has a partnership with the YouTube TV channel 247, is one of the organizations that can leverage this content, which is being scripted and will be produced by UFU graduates.

To date, only the first stage of the programmatic scheme has been implemented. The research group carried out a mini training course with undergraduate journalism and pedagogy students to discuss how technologies favor dissemination, but also the fight against misinformation. Another objective of the mini-course was to pacify the understanding regarding the role of Pre-

bunking in interventionist actions and how this approach can reach schools. There is an effort to coordinate some researchers from the Research Group in order to collect results from other experiences within the scope of Political Education, as a fundamental element for identifying and raising awareness about campaigns of a political and ideological nature. One of the initiatives that has been mapped is that carried out by the "Politize" collective. Another strategy that must result in favorable results is the elaboration of a matrix with the respective details of the application methodology, so that it can be replicated to any public of pre-adult age, not only in formal school spaces, but also in spaces educational activities coordinated by agents of organized civil society.

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