


MISINFORMATION IN DIGITAL CULTURE: reflections from Cognitive Democracy and Knowledge Dialogue

DESINFORMAÇÃO NA CULTURA DIGITAL: reflexões a partir da Democracia Cognitiva e do Diálogo de Saberes

DESINFORMACIÓN EN CULTURA DIGITAL: reflexiones desde la democracia cognitiva y el diálogo Del

Juliana Dias Rovari Cordeiro

PhD in History of Science, Techniques and Epistemology (HCTE / UFRJ). Collaborating professor in the Graduate Program in Science and Health Education (PPGECS / Nutes). julianadiasrc@gmail.com.

 0000-0003-3285-4409


Alexandre Brasil Carvalho da Fonseca

PhD in Sociology (USP). Associate professor at UFRJ, director of the Nutes Institute of Education in Science and Health. Abrasil@ufrj.br.

 0000-0002-7495-4902


Elliz Celestrini Mangabeira

PhD student in Science and Health Education (Nutes / UFRJ). Nutritionist (collaborator) of the Comer Pra Quê Movement? elliz.mangabeira@gmail.com.

 0000-0001-6039-2630


Juliana Cintia Lima e Silva

PhD student in Social Anthropology (PPGAS / Museu Nacional-UFRJ). Member of the Committee of Anthropologists / os Negras / os of the Brazilian Association of Anthropology and of GEPAD - Group of Studies and Research in Anthropology of Devotion. jcintia7@outlook.com

 0000-0001-6824-224X

Aline Guarany Ignacio Lima

Master's student in Science and Health Education (Nutes / UFRJ). alineguarany@gmail.com.

 000-0001-6067-112X

Mailing address: Federal University of Rio de Janeiro (UFRJ). Avenida Carlos Chagas Filho, 373, Bloco A - 21941-590. Rio de Janeiro, RJ – Brazil.

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ABSTRACT:

The changes that represent accessible technology and the use of social networks in digital culture impose new questions and challenges as we are, at the same time, producers and consumers of information. Disinformation affects public life and threatens democracy. Based on the ideas of Cognitive Democracy (MORIN, 2014) and the Knowledge Dialogue (LEFF, 2006), we will discuss the theme in the light of an analytical framework of the research "Values and Arguments in the assimilation and propagation of disinformation: a dialogical approach". Media education appears as a historic and democratic need to combat fake news. In this sense, the possible solutions must build and strengthen collective learning about the communication and educational processes that promote the reading and understanding of codes to interaction in social media

KEYWORDS: Knowledge; Misinformation; Media Education.

Introduction

Changes brought by accessible technology and use of social networks in digital culture pose new questions and challenges as we are at the same time producers and consumers of information. According to Santaella (2003), digital culture is where media

convergence takes place, a phenomenon that is different from the typical “living along with” that is typical to media culture. However, the author explains that this distinction between convergence and “living along with” should not neglect the fact that we live in a “true general confraternization of all forms of communication and culture in a dense and hybrid welding” (p.28). Orality, mass communications media culture, media culture (understood as the culture of what is available), cyberculture and access culture coexist and co-inhabit digital environments. In the author's words:

(...) media convergence, in its coexistence with mass culture and media culture, both of these in full activity, (...) has been responsible for the level of exacerbation that production and circulation of information has reached in our days and that is one of the trademarks of digital culture (SANTAELLA, 2003, p.28).

One of the elements requiring special attention is related to the concept of disinformation, whose most popular face is fake news. Floridi (1996) explains that disinformation means to deceive and that it is inherent to any information management system, such as communications media and the internet. In the author's words, “it is intentionally transmitted in order to deceive the receiver into believing it is information” (Floridi, 2011 as cited in Fallis, 2015, p.401).

According to the Italian philosopher, no stage in the epistemic process - from initially creating data to the final use of the corresponding information - is completely transparent. This implies a certain degree of involuntary disinformation, such as lack of objectivity (in the case of propaganda), completeness, and pluralism, exemplified by censorship or violation to communication as a human right. “Every time an information goes from the sender to the addressee, it risks being corrupted or mutilated” (FLORIDI, 1996, p.4).

The author also alerts about self-disinformation, understood as the easiest way the humankind knows to survive the daily pressure of reality, by ignoring information, or being used to know things only through a distorted way (1996, p.10). Don Fallis (2015), when reviewing Floridi's concept of disinformation, concludes it is a deceitful information whose intentional function is to deceive someone. However, in the understanding of the Italian philosopher himself, it is not always aimed at leading to error.

After the political events of 2016,¹ it was possible to identify damages to democratic processes, that were due to manipulation of data produced in different online platforms and to production and systemic propagation of disinformation in widely diversified versions and formats. In that same year, Oxford Dictionaries selected the notion of “post-truth” as the most used expression in that period (Oxford Languages, 2016). In 2017, the Joint Declaration on Freedom of Expression and “Fake News”, Disinformation and Propaganda was released, signed by different organizations, including the United Nations (UN) Special Rapporteur on Freedom of Opinion and Expression and the Organization of American States (OAS) Special Rapporteur on Freedom of Expression. According to that document:

(...) disinformation and propaganda are often designed and implemented so as to mislead a population, as well as to interfere with the public’s right to know and the right of individuals to seek and receive, as well as to impart, information and ideas of all kinds, regardless of frontiers, protected under international legal guarantees of the rights to freedom of expression and to hold opinions. (OAS, 2017, emphasis added).

In 2018, the European Commission (EU) released the Communication “Tackling online disinformation: a European approach”, correlating democracy and fake news. According to that report (2018), disinformation is understood as:

(...) verifiably false or misleading information that is created, presented and disseminated for economic gain or to intentionally deceive the public, and may cause public harm. Public harm comprises threats to democratic political and policy-making processes as well as public goods such as the protection of EU citizens’ health, the environment or security. (Tackling Disinformation Online, 2018, pp. 4).

More recently, in 2020, disinformation has taken extremely worrisome outlines in the midst of Covid-19 global pandemic, where harms to health and to processes of education and communication on health can be identified. In the face of spread of fake news on Covid-19, the Pan American Health Organization of World Health Organization (PAHO/WHO) has classified as an “infodemic” the excess of information,

¹ The referendum that resulted in the United Kingdom voting for leaving the European Union (Brexit), as well as the one about the peace agreement in Colombia, and the election of Donald Trump as the president of the United States are electoral processes permeated by polarizations due to fake news.

some accurate and some not, that make it difficult to find reliable sources and recommendations when needed PAHO/WHO, 2020). Some keep on acting as if they were involved in a contest of narratives and, therefore, propagating their lies in a coordinated, intense manner as if they were true, aiming at reaching a great network of people that trust that kind of message and those who are its bearers.

In the same period in which fake news have brought dissension regarding measures for preventing the disease and consequent deaths, Bontcheva and Posetti (2020) has called "disinfodemic" the disinformation on the virus. The confusion towards medical sciences for generating impact over all world population figures among the features of this disinformation. This kind is classified as more toxic and lethal than fake news about other subjects. The current scenario directly affects the right to know, as referred to by the UN-OAS Joint Declaration, and generates harm to the public good, such as health, as warned by the UE's Communication.

The problem that arises in the context of the pandemic is that the gravity of consequences is not limited to political aspects or the influence they may have over the decision on who to vote for, for instance. Those falsehoods also contribute to people's decision-making processes. Currently, considering the Brazilian context, people are exposed to conflicting messages that come, on one side, from the President of the Republic, and on the other side, from an array of international organizations, scientists, the press, and some governors. Philosopher Hannah Arendt (2016) is the one reminding us that lies are much more easily assimilated. While there is only one truth, lies can assume an infinity of outlines and contents, giving us the opportunity to fabricate in such a way we deny the inconsistency and unpredictability of reality.

The entire world has been facing a difficult moment with obvious and worrisome economic consequences, but mainly it has been facing a public health emergency that demands answers and immediate action. In addition to putting lives at risk, even leading to death, the propagation of fake news related to the novel coronavirus contributes to discrediting science and global public health institutions, as well as it weakens the measures taken by governments to tackle the disease (Fonseca, 2020).

Cunha (2018) states that this contradiction says a lot about our time, since communication has never been so present in people's lives; however, it has been missing the dimension where it could support a rational field of public debate in search of the truth. "What technology has given us with one hand, by widening or ability to speak to all people, new media's cunning of manipulation has taken from us with the other" (p.29).

Dardot and Laval (2016) explain how neoliberalism is not only an ideology or a type of economic policy, but rather “a normative system that has spread its influence all over the world, expanding the logic of capital into all social relations and all spheres of life” (p.7). They support the thesis that neoliberalism is first and foremost a rationality that tends to structure and organize everything from government authorities to the behavior of those who are governed.

Neoliberal society weakens collective action, because individual subjects are submitted to a competition system in all levels. New modes of subjectivation are defined from the dispute between people according to the new ways in which companies are managed, to increases in unemployment, and precarity in life and work (Antunes, 2018).

The polarization between those who quit and those who succeed undermines solidarity and citizenship. The conditions that support collectivity are destroyed by factors such as electoral absenteeism, unionizing and racism. As a consequent, the capability to act against neoliberalism and to develop collective, solidary actions is also weakened (Sennet, 2012), further thinning the social fabric.

In the midst of a sanitary crisis that is also a humanitarian one, interwoven with successive crises (ethical, political, educational and economic) with the loss of the right to know (OAS, 2017), of a dimension of rationality in public debate (Cunha, 2018) and the weakening of solidary action (Sennet, 2012), we can observe a crisis in the very foundation of contemporary knowledge. The problem of knowledge is analyzed by the perspectives by French socioanthropologist Edgar Morin and Mexican sociologist Enrique Leff. Both authors help us investigate the crisis of knowledge and its developments in order to rethink the structures of knowledge we employ to make sense of the world.

This paper aims to: (i) discuss disinformation based on the ideas of cognitive democracy (Morin, 2007) and dialogue between knowledges (Leff, 2006); (ii) present the provisory results of the research “Values and arguments in the assimilation and propagation of disinformation”; and (iii) point out possible solutions centered on literacy and critical education for media (Berry, 2012).

The problem of Cognitive Democracy

The problem of knowledge lies at the heart of the problem of life. In his Method (v. 1 to 6), Morin starts at recognizing the multidimensional character of knowing and the uncertainties of knowledge. According to this complexity thinker, every cognitive

event needs the conjunction of energetic, electrical, chemical, physiological, cerebral, existential, psychologic, cultural, linguistic, logical, ideal, individual, collective, transpersonal, and interpersonal processes that fit into one another (Morin, 1999, p. 21).

Morin (2003, 2015, 1999) believes the organizing principle of knowledge is a crucial issue and claims that nowadays it is vital to not only learn or relearn, but also to reorganize our mental system in order to relearn how to learn. Five points are presented as issues to be discussed in order to fight the knowledge crisis. First, current knowledge principles conceal what is crucial to know. The second point refers to the conflictive relationship between science, politics and ideology, showing the ambiguity between elucidation and obscurantism within the progress made by scientific knowledge.

The third point concerns the concepts we employ to conceive society. Scientific and technological advancements tend to result in simultaneously liberation and subjugating, with inevitably mutilating actions. The fourth reflection on the principles that organize knowledge addresses the inter-relationship between anthropo-social society and sciences of nature. Such an interweaving requires some reorganization of the very structure of knowledge.

Morin explains that our current age is considered the highest in progress of knowledge, fruitfulness of discoveries, and elucidation of problems. However, there is a pathology of knowledge. It is not always perceivable that unusual gains in knowledge are paid with unusual gains in ignorance. This way, "the new obscurantism comes from the pinnacles of culture, grows in the heart of knowledge, while keeping invisible to most producers of that knowledge, that always believe they are producing it only for the lights" (Morin, 1999, p. 22).

For this author, there is a Western Paradigm that gives space for the development of a disjunctive, reductive and simplifying way of thinking, also characterized by the search for a way of bringing together science, technique, industries and profit. Those principles together constitute a four-engine machine that power the march of the current stage in history, be it, capitalism (2012, p. 214). In contrast to this way of thinking, Morin presents the Ecosystem Paradigm, that arises showing its fundamentally antidisjunctive, antireductive, antisimplifying nature. It brings not a hollow "holistic" principle, but a principle of conjoining multidimensionality and complexity.

The loss of knowledge, badly compensated by the vulgarization of media, raises the essential historic problem of cognitive democracy (Morin, 2007, p. 152). The author lists five educational purposes, that are interconnected and should feed into each other. The first is a well-made head, which enables us to organize knowledge, which in its turn refers to the ability to contextualize and encompass ways of knowing, without breaking their ties to each other or hierarchizing them. That purpose would help understanding, for instance, the roles played by disinformation in those successive crises (ecological, political, economic, ethical). The weakening in global perception leads to a weakening in the sense of responsibility and solidarity (Morin, 2014).

The second purpose is teaching about the human condition by interweaving scientific culture to the culture of humanities, and assuming the inseparable triad between individual, species and society. This way, we seek to create awareness about the common fate of the planetary age, in which all humans face the same vital and deadly problems. The third purpose is learning how to live, connected to wisdom, which is not restricted to knowledge and information.

The fourth purpose is learning about uncertainty, the limits of logic and of our ignorance. "Knowing and thinking is not about reaching some truth entirely, but about dialoguing with uncertainty" (Morin, 2014, p.59) The fifth and last purpose is citizen education, that refers to consciousness and the feeling that we belong to the Earth and to our earthly identity, which is currently vital (Morin, 2014, p.73). Together, those five purposes should trigger, in the same sense, the resurrection of culture through the connection of cultures, thus contributing to the emergence of a Cognitive Democracy.

The development of a cognitive democracy is only possible through reorganizing knowledge and reforming thinking in a way that allows not only isolate in order to know, but also bringing together what is isolated. For such a mission, it is necessary to face the extraordinary challenge condensed in the following statement:

(...) suffering the continuous overload of information that flows over us every day through newspapers and TV and radio channels, or trusting a thinking system that only preserves information, that can confirm what they find intelligible, rejecting as an error or delusion anything that disproves what they find inapprehensible. (Morin, 2007, p. 153).

Morin (2007) highlights that the challenge of complexity in the contemporary world is an essential problem of thinking, of ethics, and of political action. His suggestion is to bring together, within the same perspective of reforming, reforming society (which includes reforming civilization), reforming the spirit (which includes

reforming education), reforming life, and a reformed science. The whole of those reforms encompasses the triple human identity, individual-species-society. Those reflections help us situate the problem of disinformation within the crisis of knowledge and gives us elements from which to reflect upon the conditions of thought and knowledge-building processes that have benefited the proliferation of a disinformative system. Such a system encompasses science through multiple narratives on the truth about facts, politics, and ideology. Leff brings additional contributions to think about that question.

Lack of knowledge about knowledge

The problem of knowledge is also the object of inquiry by Enrique Leff (2006), who has developed the Environmental Rationality theory. The author describes the environmental crisis as the first real-world crisis brought by the lack of knowledge about knowledge, from a scientific understanding of the world and a technological domain over nature, which generates the false positiveness about a limitless economic growth (Leff, 2006, p. 294).

This crisis is the result of a lack of knowledge about the law of entropy, that triggered the delusion of a limitless progress, infinite production, and the alienation of men, into the economical imagery. The environmental crisis announces the end of that project. The solution could not be based on refining the epistemological and scientific project that resulted in the crisis: critical poverty and socioenvironmental degradation.

Environmental issues, then, emerge as a social and ecological question that is widely generalized and spread throughout with global, planetary reach, affecting all realms of social organization, State apparatuses, and social classes and groups. This instigates a wide and complex process of epistemic transformations in the field of knowledge and ways of knowing, of theoretical and practical ideologies of scientific paradigms, and of research programs (Leff, 2006, p. 282).

According to Leff, the emerging environmental knowledge questions and reorientates the development of knowledge in at least three levels: (i) orienting the investigation and applying scientific and technical knowledges through a social demand for knowledge and scientific and technological policies; (ii) integrating diverse processes and a set of existing knowledges around a common study object and set of problems, and elaborating an integrated knowledge through interdisciplinary methods and complex systems; (iii) putting into question theoretical paradigms from different sciences, determining the re-elaboration of concepts, the emergence of new topics, the

construction of interdisciplinary objects of knowledge, and the establishment of new environmental disciplines that are able to surpass objects of knowledge, field for experimenting and ways of applying the current theoretical paradigms (Leff, 2006, p. 283).

The environmental crisis inquires knowledge, questions the epistemological project that sought unity, uniformity and homogeneity of being within thinking; the project of unifying the world through an absolute idea with a totalizing reason; of its transcendence and the transition to a sustainable future, denying limits, time, and history (Leff, 2006, p. 290-294).

The Environmental Rationality opens itself to a new environmental knowledge, in which the environment is an Other that should be considered in a relation of otherness. It is the knowledge that emerges in the space of externality of the logocentrism of modern sciences. The environmental crisis is the lack of knowledge of the real – the exclusion of nature, the marginalization of culture, the extermination of the other, the nullification of difference - in the name of unity, systematicity, and homologation of sciences (Leff, 2006, p. 388).

This knowledge unfolds in the dialogue between cultural beings, beings-knowledges. It is the gathering of collective identities based on cultural autonomies, from which projects, studies, and movements are emerging. According to the Mexican sociologist, this condition announces a sustainable development and a society whose foundations lay on the coexistence of autonomous subjects, based on their cultural diversity and on politics of difference.

The dialogue between knowledges presents itself as a process of communication between beings that are constituted and made different from each other by their knowledges, the exchange of experiences and how their knowledges complement each other. Leff warns that this is not a methodology aimed at establishing a learning community, in the same sense in which complexity thinking is not a method for interdisciplinarity of sciences. This dialogue points out to the production of new ways of understanding the world, that emerge from the dialogic exchange of knowledges and from the dispute between the meanings of sustainability in the social reappropriation of nature and culture (Leff, 2006, p.387).

The sustainable future is a social construct that arises from the conjunction beings and the dialogue between knowledges. It does not produce a synthesis between knowledges, existences, and integration of sciences: it links words, meanings, reasons, practices, purposes, that in their syntopies and dissonances, agreements and

dissension, start forming a new discursive, social fabric, giving more power to the meanings of worn ideas such as democracy, equity, diversity, and sustainability of democracy (Leff, 2006, p. 383, 389).

Besides all communicative strategy, the dialogue between knowledges takes place in the field of power in knowledge, where no word is neutral. Notions of territory, autonomy, culture, and nature are given new meanings in this process of renovating and reappropriating the world.

Epistemology of Dialectics: human developments and regimes of knowledge

From the reflections enabled by the conceptual and epistemological provocations proposed by Morin and Leff, we observed that human development processes and regimes of knowledge constitute dynamics that involve communication, and social and interpersonal relationships, as well as the (*stricto sensu*) educational system. Knowing is to be constantly situating oneself in flows of ideas, facts, feelings, while at the same time it is a sensitive way of getting in touch with the world, from different dimensions and conditions of possibility.

Bringing back what states Morin (2015), creating an environmental thinking that truly take diversity, instability, and plurality, into account, as values that are inherent to our world, that need to be recognized and incorporated to our process of constitution as sociocultural beings, necessarily involves recognizing the strategic place of communications in the history of humankind.

In contemporaneity, that challenge can be found on the development of capabilities that allow us to participate in the flow of information and diverse stimuli we are increasingly exposed to in this hyperconnected world of which we are a part. As pointed out by Morin (1999), the technological advances that we enjoy emerge from a "pathology of knowledge" that is inherent to the Western anthropocentric model. This model is based on an ontology of contradiction, where the beneficial effects of such advances in knowledge and technology are accompanied by inversely proportional effects, bringing increased poverty, exploitation, and ignorance.

It is at the heart of the interaction of these competing, antagonistic and complementary dynamics (which characterize complexity) that network communication models emerge, with the rise of digital platforms, social networks, and development of artificial intelligence. The counterpoint to this is polarization, intensification of hate discourses and the emergence of an industry of disinformation that encompasses an

entire system of production, dissemination, and management of chaos with the most diverse political and economic purposes and interests.

If concentration camps in Germany were laboratories for the transformation of enemies and allies into “superfluous men” - be it through the complete subjugation of some, be it for the systematic and naturalized exercise of cruelty by others -, nowadays our hyperconnected world is the great laboratory of post-modern domination. This new instrument of domination's fascist apparatus for controlling the masses is brought up to date through communicative oppression, marked by a systematic emptying of meaning, dissociation from reality based on experience, and a massification of discourses (SOUKI, 2006). Through the concept of thoughtlessness², Arendt (2012) demonstrates how certain ideologies can promote a suspension of rationality and make individuals adhere to a discourse above reasonability and coherence:

The effectiveness of this kind of propaganda demonstrates one of the chief characteristics of modern masses. They do not believe in anything visible, in the reality of their own experience; they do not trust their eyes and ears but only their imaginations, which may be caught by anything that is at once universal and consistent in itself. What convinces masses are not facts, and not even invented facts, but only the consistency of the system of which they are presumably part. (Arendt, 1973, p.351).

In this way, developing reflections on the crisis of the ability to know - as the foundation of the domination apparatus operated through misinformation - refers, fundamentally, to the need to think about a deep reorganization of education and of our communicative principles. Such an agenda prioritizes the discussion about a revolution in the educational field, focused on its structural inadequacy considering the hyperconnected it is embedded in, and demands a profound change in our way of living, thinking and knowing, in accordance to Morin's and Leff's propositions. In order to access the foundations that bring about this crisis, we need to access the structures of its language and strategies of action. This challenge involves understanding how the information ecosystem operates and what are its implications to the economic, political and social context in a broad way.

²Thoughtlessness comprises three elements that, when combined and disseminated in different communications media, have the power to induce adhesion among individuals: (i) distortion of reality; (ii) suspension of concrete data; (iii) predominance of pseudoscience (Arendt, 2012).

Disinformation pathways: a dialogue-centered analysis for reflecting on transformative media education

With the intention of portraying the importance of reforms in thinking, especially considering the current crisis in knowledge, we present here the preliminary results of the research "Values and arguments in the assimilation and propagation of disinformation", given the relevance of understanding how people see the role of education aiming at digital literacy. The research was conducted in the cities of Rio de Janeiro (RJ) and Recife (PE) in three stages: (i) face-to-face and online questionnaires; (ii) monitoring social networks in digital environments; and (iii) workshops with Dialogue Groups (DGs), from 2018 to 2019. This paper analyzes data from the third stage of the study - the workshops with Dialogue Groups -, seeking to identify how the narratives bring the subject of living with misinformation, discussing them from the problem of knowledge, inequality in access to media education, and to the Internet.

The Dialogue Groups methodology was used in the workshops conducted in the last stage of the research. A methodological instrument and the script for the meeting were adapted from the model used by researchers of the Brazilian Institute of Social and Economic Analyses (IBASE), based on the methodology created by Daniel Yankelovich for public opinion polls through dialogue groups. The author's main idea considers that opinions, beliefs, and judgments are built collectively through the observation of different points of view, values and realities with which people identify, through conversation and listening, and not only in a deliberate individual manner. Therefore, it takes into account the influences of dialogues in the elaboration and qualification of each possible solution presented to solve the problem of increasing dissemination of fake news.

The Dialogue Groups workshops were conducted during August 2019, being two in Recife and three in Rio de Janeiro, with the presence of 113 participants, who had registered to participate through a public call, disclosed on the Internet. All those registered were invited to participate. We sought to establish a criterion of convocation that took into account the order of registration and profile (age, gender, and profession), indicating which days the person had been approved to participate. Unattendances happened either due to voluntary desistance or because people were unable to be present at the date to which they were assigned.

Among the 113 who attended, 81 were women and 32 men. The average age was 33, with a median of 29, and half of the participants were young (up to 29 years old). Ages varied from 18 to 70 (about 10% were over 50 years old). Regarding

occupation, 30% were students, 20% were professionals working in communications and 10% teachers in both basic and higher education. The others worked in different other activities and fields (law, social work, services, cultural area, librarians, IT professionals, etc.). Finally, in relation to religion, 40% said they did not follow a specific one; 23% defined themselves as Catholic, 18% as Evangelical, 9% followed Afro-Brazilian religions, and 7% Spiritism. Other categories included agnostics, Buddhists and pantheists.

The meetings were held on Saturdays, taking 8 hours each. The first part of the meeting was dedicated to an introduction to the topic of disinformation and to a presentation of the research. In the second part, participants were divided into two large groups and invited to work around the question: "How can we fight the growing dissemination of disinformation in Brazil?". Dialogue in groups started from the exposure to the participants of what was called "pathways", that is, four possible ways to tackle the spread of false information in digital social media, such as WhatsApp, Facebook, Twitter, YouTube, and Instagram. Namely, those pathways were: 1. defending the free circulation of information; 2. investing in personal training; 3. demanding from and putting pressure on governments and companies; and 4. participating in the social control of information. Those pathways were not exclusive: they could be modified and grouped, and new pathways could be proposed. All pathways contained potentialities and fragilities. In order to answer to the aforementioned problem-question, it was necessary to make a group examination of each one of them in order to establish a qualification of the four pathways to address disinformation.

On pathway 2 (investing on personal training), the focus of the present analysis, the emphasis was on the search for training, being aligned, therefore, with an educational perspective as an alternative to overcome the problem. Digital education is pointed out as a means of acquiring skills that could enable people to be prepared to identify and fight false information.

In addition to the conversations, records of the proposed pathways on cardboard, and elaborations developed in subgroups about the possibilities of fighting fake news, an individual record sheet was also used on each of the pathways. Those record sheets listed the four pathways described above and a numerical scale for assigning a degree of importance to each of them, including a dedicated field in which each participant should make observations they considered relevant after the subgroup dialogues about each one of the pathways.

Repositioning structures of thinking into the complexity of the hyperconnected world

Based on the record sheets that registered the workshop participants' opinions, a greater degree of importance was attributed to pathway 2 (investing in personal training) after of group dialogues between participants were conducted, showing changes in the participants' understanding of the topic being discussed - fighting the spread of false information through digital social media.

As stated by Yankelovich and collaborators (2006), the opinion making process occurs in three stages: (i) expansion of awareness through information, expression of thoughts and values, and listening to other people's ideas; (ii) examination of possible solutions and their consequences; and (iii) a combination of proposed solutions and fundamental principles to reach a final resolution.

When we analyzed the comments, conditions and emphases registered by the participants regarding the pathway focusing on the educational approach, that is, the second path (investing in personal training), the potentialities registered involved the acquisition of skills for identifying and fighting false information being spread on digital media.

The participants of the study assumed as a prerogative that the State should guarantee the access to quality media education, structured through public policies with ties to formal education (materialized in basic education as well as universities), but also to popular education and formative processes carried out by social movements and organizations, without being limited only to schools, and with capillarity in actions led by civil society, with popular participation.

The perception that other solutions are needed to develop the cognitive processes on which the formative pathways offered to citizens are based, aimed at media education and at the communication flows that mark the era of disinformation and cyberculture, has become evident.

As previously explained, it is necessary to integrate interdisciplinary methods, diverse knowledges and complex systems (Leff, 2006) in order to address common problems in society. In the case of the workshops held in Recife (PE) and Rio de Janeiro (RJ), we have been focusing on examining the growing dissemination of disinformation and, this way, promoting encounters and dialogue between cultural beings and their knowledges. For tackling that disinformation, the participants made suggestions for specific actions and the involvement of various social actors, as illustrated in the sections below:

Doing it in various ways, both through educational policies and through organizations and collectives to create more and more ways to train people (courses in schools, lectures, workshops, etc.). – Recife, Brazil, August 2019.

People and their exchanges move all sectors, starting with educators, parents and journalists. – Recife, Brazil, August 2019.

It should be combined with awareness-raising programs for all age groups of the population, in addition to traditional training formats. - Rio de Janeiro, Brazil, August 2019.

The promotion of education and communication campaigns aimed at identifying disinformation and at stimulating a critical use of digital social media for people of different age groups, for example, is a recommendation that unveils invisibilities that are present in the ways that the skills needed to participate in digital culture and to live together in a hybrid world that unites real and virtual are taught. The inequalities in broadband internet access and the different levels of knowledge about how the digital environment works are also reflected in Prensky's (2001) categorization of digital natives and digital immigrants. For that author, natives are those people who were born in the mid 90's and later, and immigrants all the others who were born before this period.

By bringing to this reflection some elements linked to literacy, we point out, following what has been signaled by Berry (2012), that media education needs to go beyond literacy or digital literacy. In other words, people need to be trained to understand algorithms and their involvement in the production of programming codes, in order to reorganize their thoughts and understand how the flows of information in which they are inserted or exposed are organized. After all, algorithms can be understood as rules whose effects can be predictable, but their impacts may unfold in ways that go beyond the internet world to the world of life (Pariser, 2012).

At this point, it is worth to contest the supposed split between these worlds, virtual and real, as well as the inequalities underlying them, when shedding a light at how they were understood in the dynamics proposed in the meetings developed by this research and in the dialogues on how education could be structuring in the fight against disinformation. The records on the participants' opinions point to the issue of social inequality as an impediment to the full achievement of a critical, quality education.

I believe that [education] is not of great importance at the moment because unfortunately the Internet does not reach everyone. - Rio de Janeiro, Brazil, August 2019.

Berry (2012) presents the need to take a critical look at the access to computing and information due to the potential it can create a scenario of inequality, as if it was possible to classify as “more human” those who have access at the expense of others, in such a way that information is increasingly flowing through the market.

The obvious differences between the outside world (for those who do not have direct access to, or who may face difficulties in accessing the virtual world) and the virtual world (for those who are a part of cyberculture) make it impossible to believe in the transforming power of education to “learn how to live” in this informational ecosystem our society is in. Santaella (2003) states that this disruptive understanding of the digital era, separating the “virtual world” from “the forgotten world outside”, ignores the fact that the current political and social turbulence is due to the interrelationship of these two worlds and that, even so, digital culture does not reach everyone.

Regarding the comments registered by the participants in the record sheets and in the group conversations, it is also possible to identify a strong criticism to a perspective that makes the individual the sole responsible for searching for training and media education-related knowledge in order to combat disinformation. The adherence to this pathway for confronting the dissemination of fake news was conditioned to non relying solely on the isolated initiative of each person, especially when considering the precarities with which Brazilian society has to deal, such as inequality of access to education and communication as human rights, and the inexistence of democratic access to the Internet. Another fragility pointed out for this path was the precariousness of public education, that puts a limit to the full scope that media education should reach in order to be emancipatory and critical.

People need to learn about the healthy use of the Internet, but the problems of fake news are not entirely their individual responsibility, but a social behavior instead. - Rio de Janeiro, Brazil, August 2019.

Healthy use of the Internet and social behavior online point to the social construction proposed by Leff (2006) in the search of a sustainable future arising from the dialogue between knowledges and the encounter of beings. In these connections, synthesizing or integrating knowledges and ways of being and existing are not goals. It

is precisely in between tuning-ins and dissonances, agreements and dissension that the social discursive fabric is formed, thus enhancing the understanding of democracy, equity and diversity. This construction takes us back to complexity thinking, since it simultaneously entails competition, antagonism, and complementarity in a process that goes from dialectics to dialogics. In the participants' accounts, the importance of the internet and digital social media in the contemporary world is undeniable. The question being posed is about the reach of a citizen education that may be capable of repositioning the structures of thought for understanding this new world. In this sense, we bring the contributions by Lima (2011) to Paulo Freire's ideas on culture and communication. Freire links communication to humanity by claiming that "men cannot be truly human without communication, for they are essentially communicative creatures"; and that "only through communication can human life acquire meaning" (Freire, 1971b, pp. 65-66). Lima explains, then, that the philosophical basis of Freire's epistemology and his political implications, as well as the whole dimension of his concept of communication, are based on the idea that the human being is a creative and essentially communicative subject.

Freire sees communication as a "translation" of the dialogic principle. Thus, true knowledge results from transformative relationships between human beings and the world. It unfolds into action and reflection. "Communication is the praxis of Freire's dialectic epistemology" (Lima, 2011, p.40). This praxis comprises a specific political dimension, based on basic equality and on a radical commitment to social justice.

Therefore, Freire understands that there can be no knowledge without communication between equally free subjects. They may eventually share the same symbols, but communication is not possible until each participant in the dialogue recognizes themselves as a subject and the other equally as such. That is, subjects that are capable of participating in decisions that affect themselves and the other in a relationship of equity.

If communicating means co-participating in the act of thinking, the object of knowledge cannot constitute the exclusive term of thinking, but it is instead its mediator. Lima (2011) explains that when this recognition does not occur, there is no dialogue nor communication. If reciprocity is broken, what may happen instead is transmission, conquest, invasion, manipulation, domination.

Final considerations

The present moment is challenging and reveals weaknesses, vulnerabilities and violations to the full democratic exercise of communication, which is a Human Right. The analysis of the preliminary results of the research points to the problems that emerge from the discussion. The first aspect is losing the right to know, as well as losing the dimension of a rational field of public debate. The second is weakening the global perception of the problems of our time and the ability to act collectively against neoliberalism and to develop solidarity for common issues, starting from challenge, that reorients the development of knowledge in all fields of human activity. The solutions for losses and weakening is to rethink, reposition, reorganize and relearn the ways in which knowledge and the structures of thought that comprise plurality are organized.

Leff defends the dialogue between knowledges as a strategy for the production of new forms of understanding the world. Freire holds a similar commitment to dialogue, the basis for communication and education, in which knowledge is built in reciprocity and togetherness, among equally free subjects. It is not about making slogans, but instead a commitment to transform realities. In turn, this pathway of dialogue as advocated by Leff and Freire encourages the search for the five purposes of education, as defined by Morin: (i) a well-made head; (ii) teaching on the human condition; (iii) learning how to live; (iv) learning uncertainty; and (v) citizen education. These are the purposes that, in Morin's view, can contribute to a Cognitive Democracy.

The perspectives of Cognitive Democracy and of Dialogue between Knowledges contribute to reflect upon the demands for developing education in a way that allows critical readings of communication in digital culture. In this sense, the idea of iteracy as proposed by Berry (2012) enables an understanding of the processes and formation of knowledge and thought, which goes beyond the screen of smartphones and laptops. It is an exercise for facing the lack of knowledge about knowledge on vital problems of humanity.

The data analyzed in this research have allowed us to encounter collective identities, points of view, beings of knowledge and cultural beings, conceptions about different ways to face the problems of the infodemic and the disinfodemic as well, from the pathway of citizens' formation, while also contemplating issues that tear up the structures of the Brazilian social fabric, such as the inequality in access to universal, quality health services, as well as to the Internet.

Starting from the notion of communication and education as Human Rights, the points of view of the people who participated in those workshop resonate on the

importance of a State capable of assuring such rights. Doing so means not simply requiring from each individual to possess the skills that are necessary in our time to move through the flow of diverse information and stimuli . More importantly, it means acting in a collective and solidary way in search of possible ways for creating a critical, reflexive, and dialogical education.

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RESUMO:

As mudanças que representam a tecnologia acessível e o uso das redes sociais na cultura digital impõem novas perguntas e desafios à medida que somos produtores e consumidores de informação. A desinformação afeta a vida pública e ameaça a democracia. A partir das ideias de Democracia Cognitiva (MORIN, 2014) e do Diálogo de Saberes (LEFF, 2006), discutiremos o tema à luz de um recorte analítico da pesquisa "Valores e Argumentos na assimilação e propagação da desinformação: uma abordagem dialógica". A educação midiática aparece como uma necessidade histórica e democrática para combater as fake news. Neste sentido, as soluções possíveis devem estimular aprendizados coletivos sobre os processos comunicacionais e educacionais que promovam a leitura e compreensão dos códigos à interação nas mídias sociais

PALAVRAS-CHAVES: Conhecimento; Desinformação; Educação Midiática.

RESUMEN:

El artículo tiene como objetivo analizar las implicaciones de la pandemia COVID-19 para el campo de la educación en la región de la Amazonía de Tocantins, especialmente en relación con el desarrollo de actividades de la escuela a distancia debido a la suspensión de clases y con respecto a programas, acciones y proyectos de educación continua. ofrecido a los docentes del Sistema de Educación del Estado. La investigación se basa en el materialismo dialéctico histórico, teniendo como referencia la investigación bibliográfica y documental en ordenanzas, medidas provisionales, decretos, opiniones y otros mecanismos normativos emitidos, principalmente, por el Ministerio de Educación, el Consejo Nacional de Educación, el Gobierno del Estado de Tocantins. y Consejo de Educación del Estado. Desde una perspectiva crítica, se supone que la adopción de asociaciones público-privadas como una política educativa y la expansión de la educación a distancia compromete en gran medida el principio constitucional de la gestión democrática y la calidad de la educación.

PALABRAS-CLAVES: Conocimiento; Desinformación; Educación en medios.