

The Reader's Training in the Context of Disinformation and Fake News: Challenges for Literacy Studies in the covid-19 Pandemic and Beyond¹

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In March 2018, Vosoughi, Roy and Aral, researchers at the Massachusetts Institute of Technology (MIT) Media Lab, presented a study in the *Science* magazine. They discussed true and false news posted on the social network Twitter and evaluated by six independent agencies of fact checking, in the period from 2006 to 2017. The material was made up by 126,000 tweets, spread four and a half million times by three million people. The themes checked by those agencies and investigated by the authors, in the period prior to the covid-19 pandemic,² were diverse and dealt with politics, business, entertainment, science, natural disasters, among others. The authors conclude that a real post reaches an average of 1,000 people. However, false news can reach between 1,000 and 100,000 people. They also noted

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1 This work is connected to the actions of projects "Academic writing/scientific writing: on the forms and presence of the author, of the fields of knowledge and their disciplinary domains" (Universal public call MCTIC/CNPq 2018, process 434902/2018-7) and "Literacies in Different Fields of Knowledge" (Program CAPES-PrInt-Unesp, process CAPES/AUXPE n. 88887.310463/2018-00).

2 Covid-19 is an acronym for Corona Virus Disease, being 19 the reference to the year 2019, when the first records appeared. It is a disease with a variable clinical spectrum, from asymptomatic cases to flu-like symptoms, causing severe pneumonia and respiratory problems that can lead to death. Currently, there are more transmissible and lethal variants in circulation in Brazil and worldwide (Retrieved from: <https://coronavirus.saude.gov.br/sobre-a-doenca>. Accessed on: August 17 2021).

that the probability of false news being rebroadcasted is 70% greater than that of a true news story and that, for issues related to politics, this percentage increases. Also, according to the authors, the “novelty” factor of information is the differentiating element in the dissemination of news, amid the urgency of sharing it in digital media, instantaneous communicators and other media. The authors say:

“When information is novel, it is not only surprising, but also more valuable – both from an information theory perspective (it provides the greatest aid to decision-making), and from a social perspective (it conveys social status that one is ‘in the know,’ or has access to unique ‘inside’ information).” (VOSOUGHI; ROY; ARAL, 2018, p. 4).

Firehosing is an expression derived from “fire” and “hose”, when one wants to refer to the “dissemination of information, which can be untrue, in a constant, repetitive, fast and large-scale flow.” (MELLO, 2020). We highlight in this allegory two aspects that seem relevant in a reflection on true, false or misleading information, in a digital context in which social practices of reading and writing are taken into account. Firstly, due to the wide reach and flow of the “fire hose” – due, therefore, to the modes of dissemination and sharing on the internet –, the “fireman” – a producer/creator of internet content – can keep a distance from the place where the fire is located. In other words, the producer/creator can remain anonymous and not be identified, nor held responsible for the textual production and the consequences of its dissemination. Secondly, fire hoses potentiate the water jet, with high pressure and speed, in a wide area coverage. With this strength, speed and coverage, the reader, direct or indirect user of digital media, is the target to be reached, since (s)he is the

one that receives (or refuses, disapproves) false or misleading news, in the exchange, sharing and editing of texts in a “culture of connection” through propagable media (JENKINS; GREEN; FORD, 2014). The metaphors and associations employed in this description reveal both the potency and the dangerousness of false or misleading information in digital media.

Vosoughi, Roy and Aral's study was published in 2018, at a time when the effects of this spread of false or misleading news and its reach were already widely discussed, considering its impact on dimensions such as politics, in events such as Brexit in the United Kingdom and in electoral processes in countries such as the United States, India, Indonesia and Brazil – see Wardle and Derakhshan (2017), Castells (2018), Miguel (2019) and Mello (2020). Benkler, Faris and Roberts (2018, p. 275) assess, for example, the relevance of using state-of-the-art techniques in analyzing data from digital platforms, such as that carried out by the communication company Cambridge Analytica, in providing insights into preference of the public and the production of persuasion strategies on themes such as political ideology, deeply rooted in feelings and emotions.³ If the MIT research were redone in 2020 or later, it would still have to turn to the effects of disinformation⁴ and fake news in the context of covid-19, given not only the seriousness of the disease itself and the consequences of anti-vaccination movements (from covid-19 and other diseases) in different parts of the world, but also the fact that the access of readers and users of digital media to qualified

³ Zuboff (2020, p. 269) calls *rendition* the operations that transform the human experience into datafication, that is, that convert patterns of consumption behavior and personal data, presented as exchange value on digital platforms that advertise themselves as free of charge, in data used by the most diverse companies and institutions.

⁴ Although in the literature there is a distinction between disinformation and misinformation (see WARDLE; DERAKHSHAN, 2017), we have chosen to employ “disinformation” as opposed to the information process. From a language studies perspective, it is not possible to evaluate whether or not a person intended to disseminate an intentional lie. Thus, the term disinformation is used to characterize a more general phenomenon than that one involving verifiable false or misleading news.

and substantiated information, at the right time and in a language accessible to the reader, is considered a differentiating element in quality of citizens' lives, in the field of health and beyond, as recommended by the Sustainable Development Goals (SDGs) of the 2030 Agenda of the United Nations (UN), particularly, the SDG 3 (“Health and well-being”) in the association with 4 (“Quality education”).

In March 2021, the Pan American Health Organization (PAHO) published a guide to help countries in the Americas formulate a risk communication strategy regarding covid-19 vaccines, concerned with giving to the population – therefore, to the citizen readers, direct or indirect users of digital media and other means of communication – “all information about the immunization process, from clinical trials and the production of new vaccines, to the adoption, distribution and prioritization of groups to which one or more vaccines will be administered [...], as well as on universal access to vaccines [...].” (PAHO, 2021, p. 2).⁵ PAHO understands that strengthening the communication and planning capacities of health ministries and secretariats is of fundamental importance for combating covid-19 in the Americas, given the excess of information in circulation, amid a certain public perception of medical product safety, with doubts and distrust of the population regarding covid-19 vaccines, in a context in which antivaccination groups are associated with political leaders and other social groups (PAHO, 2021, p. 7).

In the previous year, the organization had issued an alert about the disinformation process that was expanding, even at that time, in an accelerated manner, in the dissemination of false or misleading news about the new coronavirus. At that

⁵ Retrieved from: https://iris.paho.org/bitstream/handle/10665.2/53313/OPASIMSFPLCOVID-19210009_por.pdf?sequence=5&isAllowed=y. Accessed on: August 22 2021.

time, PAHO looked at search engine search patterns related to looking for reliable sources, evidence of effective interventions, epidemiological updates, general government communications, data on cases and confirmed deaths, local and international news about covid-19. In a survey carried out in March 2020, it counted the production of 550 million tweets with the terms “coronavirus”, “corona virus”, “covid-19”, “covid_19” or “pandemic”. In a period of 30 days, according to PAHO, 361 million videos were uploaded to YouTube, with the classification “covid-19” or “COVID 19”; 19,200 articles on the subject were identified on Google Scholar. In the organization’s evaluation, as can be concluded from the excessive amount of information disclosed in a short period of time, only a part of it can be reliable and can, therefore, meet the expectations of a reader in the search for qualified information.

The disinformation problem is conceived, in a restricted conception, as verifiable false or misleading information presented as news, the so-called fake news. This term has, however, been avoided in the literature for at least two reasons. The first, according to scholars from the European Commission (2018, p. 10), is that the use of the term fake news involves not only demonstrably false and misleading news, but also fabricated information, mixed with facts, which include networks of false followers, videos manufactured or manipulated by deepfake, organized trolling, memes, targeted advertising and automated for accounts for astroturfing – that is, accounts that use influential personalities, with posts in digital media, broadcast in television commercials, according to strategies to influence public opinion, as if these manifestations were the result of an action arising from public support and not from paid cooperation. The second

reason that has justified the discredit is related to the fact that, for scholars, the term fake news has been appropriated by politicians and supporters who, having their actions criticized by the media, accuse opponents of disseminating fake news, in attacking press freedom in democratic societies (see, among others, KAKUTANI, 2018; VISCARDI, 2020). Based on research by Nielsen and Graves (2017), the European Commission (2018) notes that citizens have often associated the term with partisan public debate and shoddy journalism, rather than correlating it with disinformation practices.

For these reasons, the expression fake news has been deprecated and, in its place, disinformation, in a broad concept, has been used not only to refer to verifiable information, but also to news manufacturing and manipulation strategies; believable production strategies in certain publicity and advertising activities that exploit the believable limits to constitute the exchange value, for example, of a commodity; or even, to language strategies such as satire and parody, as discussed by experts from the European Commission (2018) cited and others such as Wardle and Derakhshan (2017), Martens et al. (2018), Pangrazio (2018), Tandoc Jr., Lim and Ling (2018). It is known that these are resources that are defined by exploring the limits of verisimilitude in language. These different strategies, the authors argue, would produce in the reader of digital media (and other media as well) difficulties in recognizing communicative purposes, with consequences for the process of meaning production between language subjects and decision-making in different spheres, such as those already mentioned in politics and health.

From the point of view of literacy studies, as discussed by Komesu, Alexandre and Silva (2020, p. 197-198), the assumption of a broad conception of disinformation allows us to problematize the prevalence of a conception of language in which this informational disorder, another term used in the literature to deal with the phenomenon, is shifted to the axis of an order according to which there would be intelligibility, clarity or sharpness in relation to what each subject would say to the other. This condition of language transparency is taken by many as an ideal, since it would produce tranquility and well-being resulting from obedience to laws, such as those of ethical coexistence among citizens. In the functioning of digital media, it is about the reader being able to receive information from a family member about, for example, other therapeutic drugs in the early treatment of covid-19, and interpret it solely as attention, care that this close person would be sharing, instead of evaluating it as a clickbait, a strategy widely used on the internet to generate traffic, through sensational content, to sites that monetize the space with paid advertising. Titles such as “10 reasons why...”, “X things you should know...”, “Now you can...”, “See how city X...” are taken to be effective in attracting reader’s attention suffocated by the volume and speed of receiving information (firehosing), under conditions afflicting a disease whose transmitting virus is in constant mutation.

As countries are in the process of vaccinating against covid-19, false or misleading news about the vaccine is widespread. In one of them, there is a warning that anti-covid vaccines would have toxic metals and would turn patients into walking 5G antennas. In a simple search with the terms “vaccine” and “5G antenna” in the Google search engine it was

still possible to find more than 667,000 results (until 8/22/2021). In March 2021, when the pandemic had lasted a year in different countries, they reached more than 2,200,000 results. This “news” of the association between the vaccine and 5G antennas was widely disseminated in various parts of the world and is among those denied by the fact-checking service of the World Health Organization (WHO), dedicated to combating fake news about covid-19.⁶ Although some immunizers may have trace metals, there are no significant doses in their composition and there is no relationship between the technology of the “internet of things” and anti-covid vaccines.⁷ Why fake news like this and so many others – vaccines would aim to implant chips in the human brain, could lead to HIV contamination, cause cancer, cause autism, lead to sex change, to name just a few – are widely disseminated and also welcomed in social reading and writing practices that directly or indirectly involve the use of digital technologies?

The answer is not obvious. At its core, the reader is recognized as suffering, directly or indirectly, from a disease that accounted for, until 8/22/2021, 211.728,725 cases of contaminated and 4,429,474 dead in the world, according to data from the North American University Johns Hopkins (JHU). Brazil appeared at that time as the second country in number of deaths (574,209, preceded by the United States, with 628,408) and the third in number of cases (20,556,487; behind the United States, with 37,696,161, and India, with 32,424,234 infected), also according to JHU data.⁸ Vaccination, of fundamental importance for controlling the transmission of the disease in

⁶ Retrieved from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters#5g>. Accessed on: August 22 2021.

⁷ Retrieved from: <https://veja.abril.com.br/blog/diario-da-vacina/as-principais-fake-news-relacionadas-a-vacina-de-vaga-lumes-as-bitcoins/>. Accessed on: August 22 2021.

⁸ Retrieved from: <https://coronavirus.jhu.edu/map.html>. Accessed on: August 22 2021.

populations, began in December 2020 in different countries. Worldwide, 4,920,008,655 doses had been administered until 8/22/2021, according to JHU data. In Brazil, until 8/20/2021, 121,263,020 people, equivalent to 57.27% of the population, had received the first dose of the vaccine; 54,001,078 people were immunized with both doses or a single dose, equivalent to 25.5% of the population, according to the Consortium of Press Vehicles of Brazil, based on data from State Health Departments.⁹ The Our World project in Data, linked to the University of Oxford, indicated, on 8/21/2021, that 32.4% of the world population had received at least one dose of the vaccine against covid-19 and 24.4%, two doses or a single one. Portugal had vaccinated, until that date, 79.34% of the population (67.44% with two doses or a single one); the United Kingdom, 70.08% of the population (61.13% with two doses or a single one); the United States, 60.18% of the population (50.95% with two doses or a single one). Data from Nigeria showed, however, that 1.24% of the population had been vaccinated (0.69% with two doses or a single one); in Tanzania, only 0.37%,¹⁰ which exposes inequality (prior to the pandemic) and the challenges of containing the spread of virus variants while there is no vaccine for everyone on the planet.

The reader, in direct or indirect contact with digital media, is not indifferent to the effects of covid-19 on the family, on the health system, on education, on the economy, whether by approval or rejection of institutionally imposed measures during this period. Nor is indifferent to the problem of disinformation

⁹ Retrieved from: <https://especiais.g1.globo.com/bemestar/vacina/2021/mapa-brasil-vacina-covid/>. Accessed on: August 22 2021. The consortium is formed by the press vehicles **Extra**, **Folha de S.Paulo**, **G1**, **O Estado de S. Paulo**, **O Globo** and **UOL do Brasil**. It discloses data based on the following criteria: (1) number of vaccinated people reported daily by state health departments; (2) percentage of vaccinated people, informed by state governments on the total population; (3) total doses received by the states, according to information from the state secretariats.

¹⁰ Retrieved from: <https://ourworldindata.org/covid-vaccinations>. Accessed on: August 22 2021.

and fake news. In terms of news and information consumption behavior, a report by the Reuters Institute (NEWMAN et al., 2021, p. 8-9), based on research in 46 consumer markets around the world, shows growing concern about disinformation in the context of the pandemic. According to the report, those who use digital media are more likely to say they have been exposed to misleading information about the coronavirus than non-users. The survey shows that the highest levels of concern are in Africa (74%), followed by Latin America (65%), North America (63%), Asia (59%) and Europe (54%) (NEWMAN et al., 2021, p. 20-21). In general, the highest levels of concern about the dissemination of disinformation are associated with the behavior of political actors, as in Brazil and Poland (both with 41%, while the world average is 29%). With regard to the use of digital platforms, the report shows that Facebook is seen as the main channel for disseminating false or misleading information almost everywhere in the world, even though instant messaging applications like WhatsApp are conceived as the most serious problem in countries such as Brazil and Indonesia (35% and 33%, respectively) (NEWMAN et al., 2021, p. 22-23).

Komesu, Costa and Ciencia (forthcoming) discuss the importance of problematizing the role of the reader in the context of disinformation and fake news, based on the recommendation made by Wardle and Derakhshan (2017, p. 22), in the context of Communication studies, regarding the “interpreter” (alongside the agent and the message): what action was taken when receiving the message? For Wardle and Derakhshan (2017 apud KOMESU; COSTA; CIENCIA, forthcoming), “everyone is a potential editor”, including the reader. Komesu, Costa and Ciencia (forthcoming, p. 7) assess, in a post-truth juncture (McINTYRE,

2018), that the attempt of the reader to self-confirm beliefs and emotions in a culture of sharing and likes goes beyond what is considered a personal position, resulting from individual and cognitive skills related to a conception of reading as mere decoding, as discussed below. It emerges in a socio-historical situation that re-signifies certain practices – therefore, certain meanings in the production of language – to the detriment of others. It is not, therefore, what the self, individually, can read or interpret, but the socio-historical conditions of production that favor the reading process and the emergence of certain meanings – contrary to others, as discussed by scholars of the discourse starting mainly from Foucault (2014, among others). Thus, in a hurried scenario characterized, on the one hand, by the excess of information in circulation, on the other, by illness, death, punctual access or lack of access to school, unemployment, mismatched guidelines issued by political leaders, as in the case of Brazil, what the digital media reader can read, what they can share in digital media is not the result of individual opinion.

Attention to the reader is given at the same time that it is not possible to control who creates, produces, distributes disinformation (WARDLE; DERAKHSHAN, 2017, p. 25-29) – as argued in the case of firehosing, according to which the “firefighter” (producer/creator/distributor of internet content) manages to keep his distance from the place (with anonymity) where the “fire” is located (false or misleading news). This impossibility of control over the production of meanings (not restricted to the digital environment, but highlighted in it) accentuates institutional expectations that academic-scientific training could be constituted, as discussed by Komesu, Alexandre and Silva (2020, p. 202), in a differentiating element in the fight

against disinformation and fake news, especially insofar as scientific literacy would imply “the ability to engage critically with and make informed decisions about science-related issues.” (SIAROVA; STERNADEL; SZÖNYI, 2019, p. 11).

In these reports from international organizations, there is a concern with the autonomy that the subject would have or may have to, when confronted with the enormous amount of information online – in the case of the 550 million posts on Twitter, 361 million of videos on YouTube, 19,200 articles on Google Scholar about the new coronavirus, identified by PAHO (2020) in a single month, or even from the more than 667,000 electronic pages mentioning anti-covid vaccines that would have toxic metals and turn patients into antennas 5G – make the “right” choice to distinguish between true and false or misleading information. From the perspective of language studies, it is a concept of subjectivity according to which the responsibility for the production of meanings would be, above all, with the reader, as if the control of this production depended exclusively on an evaluation of a personal nature, made by those who read the news, and not by the said conditions that allow reading and recognizing the “true” of the texts (FOUCAULT, 2014; PIOVEZANI; CURCINO; SARGENTINI, 2021).

Komesu, Costa and Ciencia (forthcoming) consider that the digital media reader (but not only) cannot be conceived as a “passive decoder, whose only ability would be restricted to the interpretation of graphic signs of writing and other components of multimodal texts”. Nor would it be the one who intentionally chooses what (s)he can and manages to read or edit. In the context of literacy studies, the authors argue that the commonly

evoked feature of the reader's autonomy would be close to "individual coding and decoding skills, such as those recognized by the school institution". Or, for what we are interested in discussing, the so-called "study skills", of an individual and cognitive order (LEA; STREET, 2014, p. 479), which would bring, in themselves, qualities that would be inherent to them, regardless of what it is written or read, by whom, for whom, in what context. They would allow, as the authors argue, the transfer of knowledge from one context to another, without any problems, assuming that the decoding of a language was enough for the process of producing meanings.

The language subject learns to read and also to write according to an academic acculturation and socialization "in terms of discourses and genres based on themes and disciplines" (LEA; STREET, 2014, p. 479), which, in turn, respond to the "institutional nature of what counts as knowledge in any specific academic context." (idem) – and outside this context too –; thus responding to value systems that support relations of domination over who knows how to read and write, for whom, according to which discursive genre, in which situated context and at what time – excluding, therefore, those who do not know. It is, as Street (1984) says, an ideological model of practices and events in situated contexts, institutionally and culturally dependent on the social value of reading and writing, attributed by groups that compete with each other, through a game of economic and religious forces and policies, which should be legitimized (or not) as a practice, with consequences for formal education and other vernacular literate practices of subjects (STREET, 2014). Thus, there is no social practice of reading and writing outside a

situated context (CORRÊA, 2004): there are no language facts outside of literate/oral social practices.

In the case of digital media readers, access to scientific, medical, philosophical, artistic, political, financial market information, among many others, in quantity and quality, goes beyond the empirical experience lived by the subject. McIntyre (2018, p. 35-36), among others, problematizes, from a cognitive bias, that this process of confronting the profusion of information, which to the subject may not seem or be true, generates discomfort and tension, constituting, for what interests us in a relationship of literacy studies with those of discourse, a threat to the illusion of the centrality of subjectivity, as discussed by Authier-Revuz (1990, p. 28) regarding the “function of the ignorance of the self” and the “reconstruction of an image of an autonomous subject”. Quoting Freud and the “defense of the ego”, McIntyre (2018, p. 35) observes that, in this post-truth panorama, the self would always be endowed with reason, regardless of the perspective taken.

It is as if the subject (writer, reader) deals with the neutrality of information, according to an autonomous literacy model that prioritizes the decoding/coding of language. First, they would have access to the information and only then decide what to do, how and what to interpret/opine/edit or share in digital media, “not knowing” (in the opacity of the language) that the mere allusion to the information implies immediately taking of position in front of the exposed, the “crossing” of an “exteriority that is within the subject” (AUTHIER-REVUZ, 1990, p. 29). Within the scope of this reflection, the subject does not “exchange information”, but deals with the game of meaning

effects of which he/she is also an effect (PÊCHEUX, 1990, p. 82-83), under certain socio-historical conditions (COURTINE, 2009) of particular production processes.

The use of different digital devices would allow the search for truth in the contemporary direction of a transparency of the senses of language. The post-truth subject would no longer depend on certain institutions – school/university, State – to research and have access to knowledge, (s)he would no longer be “subdued by ideologies”. (S)He would be free to say/read, according to his/her individual will, in the way he/she considers the true one, disregarding how this view of autonomy is the effect of ideologies and dependence on other institutions. Relatives, friends, acquaintances from groups of digital platforms and instant communication apps, religious leaders, thus become reliable sources because, lacking any technical or academic credentials, they would supposedly also be devoid of engagement with the interests of other social groups – they would be impartial, desired condition in this illusion of subjectivity.

According to Roque (2020), this is how “new opinion makers gain followers and dispute the prerogative of influencing public authorities” in digital media, without the mediation of scientists or any other specialists. In the context of the covid-19 pandemic (but also before and beyond), it is not enough for the reader to know the language in which the information was produced (assuming that knowledge of a language is restricted to the commented encoding/decoding). Upon receiving, for example, the “news” that the “‘Chinese’ vaccine contains replicable digitizable RNA” used to “control humanity through waves that will emit the 5G antennas”, it is not enough to know the Portuguese language to read this “news” that was widely

circulated by WhatsApp in Brazil. There is a production context that conditions the emergence of these meanings, allowing them to be read (by adhesion or criticism). It is necessary to be able to read this text in dialogue with others, characteristic of the production of the meanings of language. This intertextuality in a broad sense – therefore, this interdiscursiveness – necessarily evokes the relationship between language and history: of vaccination and of technological advance (in Asian countries, with sinophobia), of the man-machine conflict.

As discussed, the reading process is still “crossed over” by the level of trust that one has in relation to the interlocutor (immediate issuer) of the shared information. In a period of decline in the relationship of trust with institutions, it is the non-specialist, says Roque (2020), who stands out, as if the absence of a formal link with certain groups could imply inexistence of interests. Gestures and actions of public actors also (dis)orient social reading practices in a digital context (also outside it), as noted in the Reuters Institute report (NEWMAN et al., 2021), in several countries around the world, and in technical note n°. 31 of the Rede de Pesquisa Solidária (Solidary Research Network) (2021), published in Brazil. According to the assessment of the team responsible for the technical note at the time, the scope of the attacks by the President of the Republic and other politicians on CoronaVac, a vaccine produced by the Butantan Institute in partnership with the Chinese pharmaceutical company Sinovac, could affect the immunization process against covid-19 in Brazil, with strengthening of anti-vaccine groups.

Therefore, the process of reading, confronting covid-19, disinformation and fake news is constituted by a public discussion about taking or not taking a vaccine, criticizing or not

the Chinese, believing or doubting the purposes of the institutions and the effectiveness of methods scientific. The reader emerges from discursive reading practices, from the modes of circulation of texts and their supports, from disciplinary cultures, according to relations of power and authority of societies (STREET, 1984, 2014). Thus, what the reader can read is not the result of personal opinion or the opinion of those close to him, but of “injunctions imposed on him” (POSSENTI, 2010, p. 15) socio-historically, even though indirect way.

The reader does not live enclosed in “bubbles”, as people think. The functioning of digital media, in conjunction with an algorithmic governance of bots and cyborgs – as is seen with digital influencers who “appear” as a suggestion on the personal pages of digital media and have their accounts handled by companies, with paid followers and programmed likes, with ready-made comments of consent or even attacks on divergent opinions – corroborates a stability effect, of an alternative truth that could be assumed by the reader. These practices coexist in conflict with others, in the interdiscursiveness of conspiracy theories; decline of traditional media; attacks on legitimate universities and scientific centers; ideological positions disguised as controversy; false symmetry in scientific argumentation, with the idea that “both sides” should be heard, when there is scientific consensus and rigorous investigative work in only one of them, leaving empirical experience to the other (ROQUE, 2020). The internal coherence of unfounded narratives thus gains value in the lack of adherence to the truth that is taken as external to the subject.

Scholars such as Islam et al. (2020) recommend that governments and other agencies should investigate patterns

of rumors, stigmatized comments and conspiracy theories in different cultures, in order to develop appropriate means of communication to confront covid-19 in their respective countries (ISLAM et al., 2020, p. 1627), with public debate and oriented development on the impacts of fake news and disinformation (GALHARDI et al. 2020, p. 4208). At the core of these recommendations is the reader and a background that is far from individual, but which demands reading conditions with the other, in plurality, dialogue and public debate in which arguments are presented and discussed in a reasoned manner, in the recognition of historicity of which language is constituted and which allows one to critically read the false connection between headlines, illustrations, captions, the false context in image manipulation, deceptive or imposter content, the fabrication of content in favor of groups. Threat, violence or criminalization of divergent thinking can repress but cannot erase the heterogeneities of language. The school and the university have a prominent role in confronting disinformation and fake news and need integral conditions for work, while showing how science and scientific practices can transform everyday actions and sayings.

In this sense, the school and the university are inscribed as important agents, facing the contemporary challenges of literacy studies, with an emphasis on critical literacy and scientific literacy. In the critical literacy agenda (GEE, 1994; McLAREN, 1998; FREIRE, 1987, 1996), the commitment to the formation of the critical is an essential condition for the functioning of democracy, the exercise of freedom, the establishment of equality and social justice, a condition that presupposes scientific literacy, assuming science as a relevant cultural product of humanity. The engagement of the population in relation to science as well

as their participation in public policies that define the priority articulations between science, technology and society constitute fundamental parameters for scientific education (AYALA, 1996).

Taking such defenses into account, we understand that scientific and critical literacy is linked to digital literacy or, in other words, to the explicitly organized development of competences in digital literacy. In fact, numerous pieces of information pass through these means, and, contrary to what a common thought built by the concept of Digital Native can convey (PRENSKI, 2001), many works currently show that young people need to be trained for the specifics of this type of reading and appropriation (LARDELLIER, 2017; FLUCKIGER, 2017-2019; among others). Furthermore, if it is a question of passing this mediation through the school and university institution, it is also necessary to foresee the training of teachers.

From this perspective, centered on the development of a critical spirit, civic awareness and the exercise of democracy, it is not about acculturating only to technological aspects, but also to ways of (re)configuration of discourses (ROSIER, 2020; LONGHI, 2017; among others), to questions of ethos and posture (ROSIER, 2019), or even the expression of authority and influences on the Web (see dossier *Autorité et Web 2.0 : approches discursives* in the journal *Argumentation et Analyse du Discours*, n. 26, 2021).

This dossier articulates and gathers researchers aligned to the central discussion projected, outlined under different looks

and theoretical perspectives, an aspect we see as quite positive, especially considering the complexity of the phenomena related to disinformation and fake news.

DÉBORA LIBERATO ARRUDA HISSA discusses the phenomena of demediatization and infodemics in their relation with the spreading of fake news as a consequence of the vulgarization of disruptive opinions propagated by the digital culture, which settle in ideological orientations that recreate and feed antagonism.

The article by GABRIEL GUIMARÃES ALEXANDRE takes as its object the role of “discursive memory” – a concept treated as the object and role for the training of the reader in pandemic times – in headlines of two fact checking agencies that disprove untrue news about covid-19 in social media.

Assuming as the object the phenomenon of disinfodemics in Brazil, ELIARA SANTANA FERREIRA discusses the role of federal public instances and of communication media aligned to the president Jair Bolsonaro, in the consolidation of a process of disinformation about covid-19.

Through the analysis of statements by current president of Brazil, Jair Bolsonaro, and positions built upon them, EMERSON DE PIETRI, TATIANE SILVA SANTOS and THIAGO MENA approach discursive strategies of destabilization of meanings and their relations with information manipulation mechanisms.

Taking as the corpus the opening speech by the current president of Brazil, Jair Bolsonaro, at an UN assembly in 2020, MARIA ANGELA PAULINO TEIXEIRA LOPES and FERNANDA SANTANA GOMES analyze the axiological positions present therein.

SÉRGIO LUIZ BELLEI looks upon the concept of “post-truth”, through the discussion of new interpretations of the short story “Bartleby, the scrivener”, written by Herman Melville.

The text by ANA CLÁUDIA BERTINI CIENCIA is dedicated to the discussion about the competences of high school students for identifying fake news, in social practices of reading and writing mediated by digital media.

From the reflection about pragmatic factors of textuality in the production of fake news about covid-19, NATÁLIA COÊLHO BAGAGIM, MARCELO SILVA DE SOUZA RIBEIRO and LUCINALVA DE ALMEIDA SILVA discuss the level of critical training of readers, considering the large circulation of publications about the cure of covid-19 with household materials.

EULÁLIA LEURQUIN and CHLOÉ LEURQUIN, through the analysis of postings with fake contents in the social networks at two important moments of Brazilian life, argue in favor of training critical readers.

Aiming at the training and critical literacy of high school students, MARIANA GALDINO SANTANA presents and justifies a teaching plan aimed at the construction of reading that analyzes critically the development of opinion from receiving “post-facts” that take as a reference the North-east of Brazil and people from the Brazilian Northeast.

The dossier is concluded by the interview with JOHANNES ANGERMULLER performed by LUCIANA SALAZAR SALGADO and LETÍCIA CLARES, and translated by GUSTAVO PRIMO. In the interview, the German linguist discusses about questions connected to the discourses in the context of hyper-digital communication.

The free section contemplates one article and two reviews. In the article, FERNANDO MIRANDA ARRAZ and FAGNER RIBEIRO SENA, through the analysis of the discourse of the current president of Brazil, Jair Messias Bolsonaro, foster a reflection about Discursive Formation and Discursive Memory, in the perspective of the French line of Discourse Analysis.

ANDRÉIA TEIXEIRA reviews the fourth volume of the collection of e-books “Práticas discursivas em letramento acadêmico: questões em estudo”, titled “Efeitos da covid-19 em práticas letradas acadêmicas”, organized by Juliana Alves Assis, Fabiana Komesu and Cédric Fluckiger.

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