




Social Representations of Brazilians Regarding the Fires in the Amazon

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ABSTRACT – The fires in the Amazon rainforest triggered a series of events with wide media coverage in 2019. This study aimed to analyze the social representations (SR) of the Brazilian people, from the analysis of 679 comments on news articles related to the wildfires, shared on the Facebook pages of the news outlets *O Globo*, *El País Brasil*, and *BBC News Brasil*, newspapers of great impact in Brazil. The Descending Hierarchical Classification of the IRaMuTeQ program produced three main types of SR from the comments, one being empirical, anchored in natural phenomena; a second being geopolitical and a third where controversies emerged in the SR that reflect the political polarization of the country. The debate mainly engages a polarized dispute between Internet users from the left wing and right wing.

KEYWORDS: environmental impact, Amazon rainforest, social representation

Representações Sociais de Brasileiros Sobre as Queimadas na Amazônia

RESUMO – As queimadas na floresta amazônica desencadearam uma série de eventos com grande cobertura midiática em 2019. O presente estudo buscou analisar as representações sociais (RS) de brasileiros, a partir da análise de 679 comentários de notícias relacionadas às queimadas, compartilhadas nas páginas do Facebook dos jornais *O Globo*, *El País Brasil* e *BBC News Brasil*, veículos de comunicação de grande impacto no Brasil. A Classificação Hierárquica Descendente do programa IRaMuTeQ, mostrou três principais tipos de RS dos comentaristas, sendo uma empírica, ancorada nos fenômenos naturais; uma geopolítica e uma terceira classe onde surgiram RS polêmicas, que refletem a polarização política do país. O debate ocorreu principalmente em uma disputa polarizada entre internautas do espectro político da esquerda e da direita.

PALAVRAS-CHAVE: impacto ambiental, Amazônia, representações sociais

The latest report from the Intergovernmental Panel on Climate Change (IPCC, 2019), highlighted that in the previous seven decades, there has been a great increase in the consumption of food and industrial products worldwide, which, in turn, has driven the expansion of cultivated areas and pastures. This has led to the deforestation of diverse ecosystems, as well as increases in desertification, the emission of greenhouse gases, and the frequency and intensity of extreme phenomena such as droughts and dust storms. As the most drastic consequences of these actions, the IPCC highlights climate and environmental changes, such

as global warming, the contraction of the polar ice caps, and alterations in climatic phenomena such as El Niño and La Niña (Marengo & Souza, 2018).

Brazil, as a major producer and exporter of agricultural commodities, does not escape this reality, having expanded the agricultural frontiers in the Amazon region during this period (Copertino, Piedade, Vieira & Bustamante, 2019). Deforestation of anthropic origin has altered the climatic, ecological, and environmental stability of the Amazonian tropical forests (Nobre, Sampaio & Salazar, 2007). As a result, the Amazon rainforest became highly flammable and

susceptible to fires and, currently, has entered a new regime of warmer and highly variable climate, with more prolonged and intense dry seasons (Copertino et al., 2019).

In 2019, the situation worsened even further when the federal government endorsed the loosening of compliance with environmental laws. The environmental damage attributed to the current government includes a review of environmental conservation units, flexible environmental licensing, cuts in resources, reduction, and reprimand of inspection actions, reduction of international fundraising for forest preservation actions, and exploitation of natural resources in preservation areas (Trigueiro, 2019). As a result, the Brazilian Institute for Space Research (INPE, 2019) registered 89,178 outbreaks of fires in the region in 2019, representing an increase of 30% over the previous year. Forest fires are quite common in the country, however during that year they would lead to more serious consequences than usual for the local population, such as an increase in the incidence of respiratory diseases and damage caused by storms and pathogens (Silvério, Silva, Alencar & Moutinho, 2019).

Although the consequences of the fires were reported in the media from July 2019 (Zaitchik, 2019), the fact was only publicized nationally in the mainstream media when a dense cloud of smoke, resulting from these fires, darkened the sky of the city of São Paulo, on the 19th of August. Other consequences were experienced by residents of the capital, such as gray rain and the smell of smoke (“Chuva escura em SP,” 2019). From that moment, due to the great visibility and repercussions of the phenomenon – which occurred in the main city of Latin America – the fires and their consequences started to be widely debated in Brazil and worldwide, in the various media and on social networks (Putti, 2019; Sandy, 2019), becoming an object around which social arguments and rhetoric start to be constructed.

From then on, the arguments about the fires started to trigger a politicized, polemic, and polarized debate among social groups in Brazil, like other environmental phenomena. According to Jaspal, Nerlich, and Koteyko (2012), the climate was one (among others) of the most politicized and polarized themes at the beginning of the 21st century. The authors highlighted that, in general, the poles are divided between believers and unbelievers regarding anthropic interference in the climate, despite the scientific consensus confirming this hypothesis in 97% of the articles published on the topic (Bertoldo et al., 2019). Variables such as gender, age, education, and political identity are identified as the most relevant to influence environmental attitudes, with men, those with less education, and older and right-wing people more prone to disbelief (Poortinga, Whitmarsh, Steg, Böhm & Fisher, 2019; Bertoldo et al., 2019). The country of residence, the respective climates, and the economy are also related to these inclinations (Poortinga et al., 2019).

Therefore, it is considered important to study how the analysis regarding environmental issues and practices is socially constructed and managed (Brondi, Armenti,

Cottone, Mazzara & Sarrica, 2014). Among the interested approaches to the knowledge (co)construction process, the Social Representations Theory (SRT) has been a fruitful structure that contributes to a deep comprehension of issues related to social thinking about the environment (Castro, 2006; Rouquette, Sautkina, Castro, Félonneau & Guillou-Michel, 2005).

Social representations (SR) are formed through processes of signifying reality by social groups culturally circumscribed (Moscovici, 1961/2012). They reveal the group, territorial, and sociocultural belongings of individuals (Jodelet, 2001; Camargo, Scholösser & Giacomozzi, 2018), being generally constructed in the communication processes, loaded with group and individual idiosyncrasies and meta-information (Wagner, 1995).

Moscovici (1988) also premised two processes for the construction of social representations: anchorage and objectivation. The anchorage concerns the assimilation of an idea or a “strange” object to a social representation already known by the subject, i.e., concepts and images which was already familiar and contribute to a comprehension of this new object. This process allows the unfamiliar to be assimilated and unified into a social representation of a new object. Objectivation refers to the concretization, making concrete what was abstract, objectifying in images. Therefore, those two processes make concepts and images into independent things (Moscovici, 1988); they should not be understood separately, but rather as occurring simultaneously, as two sides of the same history (Marková, 2000).

Moscovici (1988) proposed the division of SR into three types. “Hegemonic” SR is more consensual and shared by society in general, “Emancipated” SR comes from specific ideas of a group, and can be shared among other groups of the society, while “Polemic” SR marks particular groups in conflict. Periods of economic crises and political disputes can foster the production of polemic SR and the progression of these conflicts, debates, and controversies is what fuels political polarization (Arruda, 2018). Currently, Brazil is experiencing an intensely politically polarized moment (Giacomozzi, Fiorott, Bertoldo & Contarello, 2023; Giacomozzi, Tavares, Silveira & Justo, 2022), which can be observed in the relationships between social groups, social networks, and the media.

In the SR formation process, the media assumes a fundamental role, as exposed in Moscovici’s seminal work (1961/2012). Social representations are entities that circulate, intersect, and crystallize continuously through speech, in daily situations, with an emphasis on social communications.

Since the emergence of the internet in the 1990s, it has always been used as a space for debate and controversy. With the emergence of social networks, their political use became even more widespread, driving the formation of social movements and triggering major demonstrations at the beginning of the 21st century. International examples

of these events are the “Arab Spring” and “Occupy Wall Street” and in Brazil, the “*Marcha das vadias* – March of the bitches”; the “*Marcha da maconha* – Marijuana march”; the “*Jornadas de junho* – Days of June” (or *manifestações dos vinte centavos* – manifestations of twenty cents); the formation of the “*Movimento Brasil Livre* – Free Brazil Movement” (MBL); the “*Manifestações pelo impeachment de Dilma Rousseff* – Demonstrations for the impeachment of Dilma Rousseff” and others (Machado & Miskolci, 2019).

Accordingly, comments on social networks allow opinions and points of view, whether they are normative or counter-normative, to be freely disseminated. The internet provides a space for social actors to express themselves freely and without censorship, thus creating a fertile field for polarized debates (Machado & Miskolci, 2019). Therefore, analyzing comments on social networks on a given topic constitutes a case study for examining the rhetorical aspects of social and political contestation. Since the comments of Internet users regarding the news can be anonymous, there is space for interaction between commenters, providing insights into argumentation. The comments also have the potential to influence the comments of others and may more widely

reflect shared social representations and collective beliefs (Jaspal, Nerlich & Koteiko, 2012), at least in a part of the Brazilian public.

Facebook, among other social networks, has been described as an echo chamber for group affiliations, increasing polarization due to a partial view of reality caused by the social information bubble (Del Vicario, Zollo, Caldarelli & Scala, 2017). And several studies supported by SRT, at a national level (Rozeno, Giacomozzi & Vitali, 2022; Leandro, Giacomozzi, Fiorott & Marx, 2019; Vitali, Presotto, Gizzi, Gomes & Giacomozzi, 2021) and in an international one (Alaya, 2016; Rosa, Bocci & Salvati, 2021) have used the analysis of comments on social networks because they understand that this is an important context for the investigation of common sense theories about certain social objects with wide commotion. Therefore, the theoretical perspective of the work is based on the Social Representations Theory, as described above.

Therefore, this study will serve as a basis to establish assumptions that are used concerning different issues and that have contributed to the polarization among Brazilian social groups surrounding the issue of climate and the Amazon.

THIS STUDY

Based on the above, we proposed to analyze how Brazilian Internet users participated in the construction of arguments about fires in the Amazon rainforest, one of the largest ecosystems on the planet, at a time when the environmental impact on the forest was highly visible and reported by the media around the world. Considering the Brazilian context of social controversy today, it was expected to find

automated references to groups and identity positionings, in dynamics typical of polemic social representations. On the other hand, it was predicted that little in-depth discussion about solutions and guidelines in the active sense of the term “policies” – typical of emancipated representations (Moscovici, 1988) – would be identified.

METHOD

This was a documentary, descriptive, and retrospective longitudinal study (Gil, 2008). Comments on news shared on Facebook from three news outlets with a high impact factor were analyzed. One national news outlet (*O Globo*) and the Brazilian versions of two international news outlets were selected (*El País Brasil* and *BBC News Brasil*). The choice of the different news outlets considered, in addition to the impact factor, the coverage of a diversity of readers. The exclusion of some high-impact news outlets, such as *Folha de São Paulo* and *Zero Hora*, was because despite having a relevant impact factor, they did not share the reports on their *Facebook* pages.

The choice of *Facebook* was due to the causality among media, the information disseminated on it and public opinion (McCombs, 2009), with social networks currently being popular, used even by news outlets to spread news and information. On platforms such as *Facebook*, the reader, in addition to following the news, gives opinions and interacts with other profiles in the space for comments (Mitozo,

Massuchin & Carvalho, 2015), expressing important content that can reveal belongings, values, and social representations.

The tool “search for publications” with the descriptors “*queimadas Amazônia*” was used, considering the large number of reports, we opted for the first publication of great impact regarding the fires in the Amazon region in 2019. All comments made by internet users about the articles that reported visible consequences of the fires in the capital of São Paulo were selected: “Rondonia for a day: increased fires change the color of São Paulo’s afternoon”, of August 20, 2019, from the *BBC News Brasil* (73 comments); “Optical phenomenon that darkened SP is one of the consequences of the fires in the Amazon”, of August 20, 2019, of the *O Globo* news outlet (331 comments) and “Fires spread through the forests of the North and Midwest and can even be noticed in the sky of São Paulo”, of August 19, 2020, of the news outlet *El País Brasil* (275 comments), totaling 679 comments, 247 of which were made by women; 426 by men and 6 by user profiles without definition of gender.

The textual material was analyzed using the IRaMuTeQ program, through which a Descending Hierarchical Classification (DHC) was carried out. The IRaMuTeQ software is a free program that performs different forms of statistical analysis on the textual corpus (Ratinaud, 2009). The resource is used in the social sciences, being considered a reliable tool in the analysis of qualitative and quantitative content, employing, among other functions, a hierarchical descending classification analysis. According to Sbalchiero (2018), this method guarantees the use and coherence of the data analysis recorded by the researcher and includes the validation of the data measure, which combines scientific rigor with qualitative details.

As an inclusion criterion, comments or symbolic manifestations that addressed the theme of the reports were selected. Emojis and onomatopoeias were transcribed

according to the emotions they expressed, such as anger, sadness, laughter, fear, and dissatisfaction. As an exclusion criterion, comments on the comments and some main comments that did not address the topic of news were not considered. The sex of the commenters and the news outlet where the comments were posted were the only two variables that could be identified in the comments and were inserted in the command lines of the corpus.

To standardize the IRaMuTeQ analysis, it was decided to standardize some recurring terms, opting for the most frequent referent such as “bolsominions” and “minions”, which were transcribed as “bolsominion”, and “left-wing” and “left-handed”, converted into “left”, thus seeking a better DHC. The excerpts from the comments cited in the results below were selected by the authors.

RESULTS

The IRaMuTeQ program divided the corpus of 679 texts into 746 text segments (TS), of which 85.60% were retained in the DHC (636 TS). Initially, the content was separated into two subcorpora. The program separated a set of two classes

(2 and 3) from class 1. The classes were named after their predominant content. The dendrogram (Figure 1) shows the three classes produced by the DHC with the respective first 20 words representing each class, by frequencies and

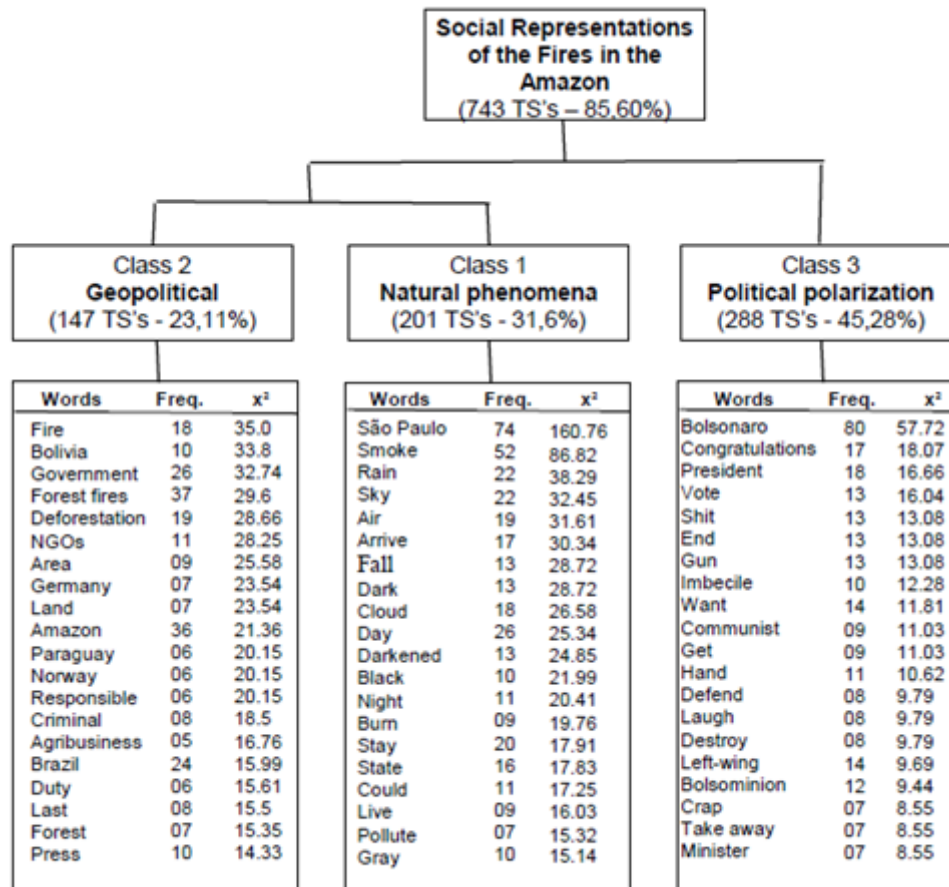


Figure 1. Dendrogram of the Classes

chi-square value. The titles of the classes were designated based on the interpretation of the grouping made by the program, as well as by the general set of significant words.

Classes 2 and 1 are related to each other, as their contents dealt predominantly with the materiality of the fires and with the hypotheses about what or who caused this phenomenon, highlighting the possible involvement of agencies, institutions, and groups in what happened. In these two classes, it was observed that the SR anchored, mainly, in the visible and practical effects of the phenomenon, such as fire, smoke, pollution, and the dark sky, and in the possible agents involved, such as agribusiness and different authorities. There was also a strong tendency to deny the scientific consensus propagated in the news outlet reports, showing that the SR formation process was also crossed by other reference sources, mainly political. The politicization of the debate was even greater in the other subcorpora.

Class 2, entitled “Geopolitics”, is composed of the subcorpora that dealt with the phenomenon in a predominantly empirical way. In it, geographic and political issues, involved in the darkening of the sky in São Paulo, were the main references of the debate. As shown in Figure 1, cities, states, and countries of the Amazon region where the fires occurred and the involvement of the federal government and other countries in the preservation of the Amazon were mentioned. The fires were portrayed, predominantly, as an old problem, or as a problem linked to environmental policies, as in the following excerpt made by a female commenter, extracted from the page of *El País Brasil*:

The governments of Germany and Norway are the main financiers of the Amazon Fund, which has many billions. Norway donated ninety percent of that amount, followed by Germany and Petrobras. In 2019, Bolsonaro’s government declared that it would use the Fund to indemnify land expropriations and favor forest clearing in preservation areas. Norway and Germany withdrew their financial contribution to the Fund and faced with the failure of the measures adopted by this government. (Commenter: Silva, year of 2019)

In the following comment, from the *BBC News Brasil* page, the male Internet user attributed the responsibility for the fires to the environmental policies of the current government:

Bolsonaro and Salles cut thirty-eight percent of the funds for the prevention of forest fires, blocked ninety million of IBAMA’s money, making inspections unfeasible, and withdrew ninety-five percent of the resources to fight global warming. Environmental destruction is government policy! (Commenter: Gonçalves, year of 2019).

As in the comments above, reports about the alleged actions of groups, institutions, political, economic, and social movements, and government actions (or lack of them) in

the fires of the Amazon region, were repeatedly found in the comments grouped in this Class.

In Class 1, called “Natural Phenomenon”, there were comments that denied and others that credited the phenomenon with veracity, and both were based on what was visible and reported, as in the following comment, made by an Internet user, extracted from comment published on the news from *O Globo*:

I’m from São Paulo and I have never seen this happen. With the arrival of the cold front, or with heavy clouds, the sky always gets darker, but never in the proportions that were seen this week. It was night and not cloudy. The sun was unable to penetrate the thick soot cloud that was over the capital. (Commenter: Perez, year of 2019)

Despite the arguments contained in this class seeking comprehension from explanations of a biological/natural nature regarding the phenomenon, a trend of politicization and denial of the relationship between fires and their consequences could be observed, as described by the male commenter, on the *O Globo* page:

The capital has never had problems with air pollution, it was only when Bolsonaro arrived that it started (laughs). Bunch of sons of bitches, (laughs). And that smoke came from the Amazon and passed by where I didn’t see it here in MT?” (Commenter: Araújo, year of 2019)

Criticism was also made of the current government’s environmental policy, as can be seen in the comment published on the *El País Brasil* page by a male Internet user:

Meanwhile, that imbecile there from Bolsonaro says that there is no illegal logging, fires, or global warming, the dumb minister says that the satellite photo is a lie. I hope that of the millions of inhabitants of the State, the idiots who voted for this shit have seen what this city was today, to see the price for the country of voting for this arrogant person, ignorant about environmental issues. (Commenter: Leme, year of 2019).

Class 3, which differed from the previous two, was entitled “Political polarization” and presents the polarization around the theme of the environment, in a dynamic typical of polemic SR, in a very hostile way between the groups. One group attributed the responsibility of the fires to the current government, especially to President Jair Bolsonaro, his supporters, and the Minister of the Environment, as in the text of the female commenter, extracted from the page of *El País Brasil*:

Congratulations, Bolsonaro, for bringing the apocalypse. I hope the Bolsominions are all happy and satisfied. And all animal protectors who voted for Bolsonaro, swallow the hypocrisy of having killed hundreds of animals burned alive. (Commenter: Sobieski, year of 2019).

From this debate, the other group then expressed the opposite position, demarcating the political polarization and the controversy that is a background for the SR on fires in Brazil. Supporters of the president took up his defense and denied the veracity of the reported phenomenon, attributing to the media the role of spreading false news to intentionally harm the government. Groups and movements opposed to the government, such as the Workers' Party (PT); as well as non-governmental organizations (NGOs) were held responsible for the fires in the Amazon region, for alleged criminal action, as observed in the content of a female commenter, published on the *BBC News Brasil* page:

Deforestation has been increasing for years. PT scrapped IBAMA and Rio Doce will be lifeless for eighty years. Europeans think here is a Colony. It can scold us, and the lackeys will accept everything. Bolsonaro is responding by showing the importance of the country. Voted in a thief of the people who ruined the country, PT is guilty of the inspections having been scrapped. Bolsonaro spoke very well. The Amazon will always be defended. It is part of our history and heritage and any criminal use will be combated. The map is clear and shows that Dilma scrapped IBAMA and deforestation has been increasing for years. The international left is sensationalizing

this. No government in the world is responsible for fires. Fires occur in the richest countries in the world. Other bodies such as the governors and the public attorney's office can and must act. PT left the public administration ruined. (Commenter: Jobim, year of 2019)

An even more hostile male internet user posted on the *O Globo* page:

Globo garbage with another fake news to terrorize the population that does not know anything [about it], these NGOs are a disease that wants to destroy Brazil, and the left, whether *petralha*, or PSDB, are all in the same boat. A bunch of rubbish vultures. (Commenter: Ribeiro, year of 2019)

Therefore, classes 2 and 1 grouped the comments that constructed SR anchored in their natural, geographic, and spatial characteristics, while class 3 grouped the comments that dealt with the phenomenon in a more polemic, politicized, and polarized way. The program did not associate the variables explored with any of the classes. The news and the nature of the comments analyzed in the three news outlets were similar, regardless of the news outlet, or the sex of the commenter.

DISCUSSION

This study aimed to analyze comments on the social network about news published regarding the fires that occurred in the Amazon in Brazil in 2019. It was observed that the polarization and the construction of polemic SR marked the debate about the fires in the Amazon region and their consequences. According to Moscovici and Doise (1992), polarization occurs in the direct debate between two rival groups. According to these authors, the degree of engagement of the groups in the cause debated increases the degree of polarization and decreases the possibilities of changes of opinion. Similarly, Poortinga et al. (2019) and Bertoldo et al. (2019) emphasized a strong association between political belonging and SR regarding climate change, also highlighted in previous studies (Hoffman, 2011; McCright & Dunlap, 2011; McCright, Dunlap & Xiao, 2014). According to Elcherot, Doise, and Reicher (2011), the individual's political attachment has a strong influence on the positionings they take faced with the phenomena of the universe, which normally leads to polarization, as was observed in the present study. Usually, polarized debate occurs between groups of well-defined and opposing ideologies, such as right and left. In the present study, polarization took place between followers and opponents of the president, reinforcing the role of Jair Bolsonaro as a central element of political polarization in the country.

The SRT emphasizes that the polarization of environmental phenomena is also marked by the dissipation of polemic SR, which was also found in the present study (Jaspal et al., 2012; Bertoldo et al., 2019; Zanco, 2019). Polemic SRs differ

from others in that there is a shift from consensual opinions to more extreme opinions (Moscovici & Doise, 1992). In addition to strong markers of group belonging, polemic SR reveals beliefs and disbeliefs by groups about certain phenomena and consensus. It was possible to observe the replication of some common elements of controversial SR of groups associated with the international extreme right, such as negationism, conspiracy, anti-environmentalism, anti-scientism, and McCarthyism (Marchi & Bruno, 2016; Brown & Lee, 2018; Azevedo & Bianco, 2019; Martini & Alves, 2019). These elements are present in the speeches of extreme right-wing leaders of the world, being understood by scholars as a management strategy for both policies and populations (Azevedo & Bianco, 2019; Martini & Alves, 2019).

For Negara, Plante, and Lévesque (2020), Polemic SR arises from conflicts and controversies, usually dissipated from propaganda communication systems. The comments analyzed here were posted on news outlet social media pages aimed at the public, therefore, in diffusion systems, according to the classification adopted by Moscovici (1961/2012). In this study, therefore, we observed that although the vehicles are disseminated and have concentrated their information based on scientific consensus, there was ideological and conflicting dissemination in the comments, especially around politics, which may reflect the great political polarization that Brazilians are experiencing at present. The polarized and controversial context would therefore facilitate the emergence of polemic SR, even if based on texts written from a diffusion system.

Accordingly, even though the comments of the three news outlets analyzed for this study were based on technical-scientific information regarding the increase in fires in the Amazon region and their implication in the darkening of the sky in the city of São Paulo – supported by respected bodies and experts – the comments of Internet users were divided into at least two opposing groups that manifested completely different SR over the same climatic event, in a polemic SR dynamic. While one group, which criticized the current government, attributed the phenomenon to neglect of the environment, the other group, which expressed support for the government, judged it to be “fake news”. Anti-scientism, once again, marked the debate that involved polemic and anti-consensual SR, of an arbitrary and non-dialogical nature (Negura et al., 2020). This same trend has already been observed in right-wing groups, and other studies on the interpretation of environmental phenomena in Brazil and worldwide, as highlighted by Jaspal et al. (2012); Bertoldo et al. (2019), and Zanco (2019).

The SR shared in the comments of internet users that expressed direct or indirect support for Jair Bolsonaro, followed the same logic of the speech of the president and other global representatives of the extreme right, such as Donald Trump, ex-president of the United States, a reference widely known as environmental and scientific denialism, as found in the examination of his publications on social networks (Zanco, 2019). An example of great repercussion was when Jair Bolsonaro claimed that the increase in the outbreaks of fires in the Amazon region, published by INPE was untrue and exonerated the then director of the Institute, two weeks before the darkening of the sky in São Paulo (Leitão, 2019). Another example that started from the president and was mentioned in the comments of his followers was the belief in criminal acts by NGOs and social movements and people supposedly linked to the left and communism, in the burning and in associating the darkening of the sky of São Paulo with them (Mazui, 2019). Accordingly, it is considered important to highlight that the point of view of political leaders is very important as it can shape representational systems to create social realities that suit their interests, or their worldviews. This is because representations do not arise spontaneously from a neutral process of contemplation. People see the world in a particular way, from constant exposure to certain points of view, validated by their groups of belonging (Elcheroth et al., 2011).

The main argument adopted by the supporters of the president to deny the factuality of the news was that the smoke that darkened the sky in São Paulo had not been seen in other cities closer to the Amazon region and that, therefore, the darkness in the São Paulo capital was associated with other factors, such as rain and pollution. However, these consequences were reported weeks before the event, with the governor of the state of Amazonas decreeing an emergency, on the 2nd of August, in the south of the State

and the metropolitan region of Manaus, due to the forest fires (Carvalho, 2019).

Studies using the SRT show that people linked to the political spectrum of the right tend to assume a “negationist” posture concerning the effects of human actions on climate change, disagreeing with the scientific consensus on the topic (Jaspal et al., 2012; Bertoldo et al., 2019). Guareschi (2018) stated that the war of ideas and the comprehension of reality occur according to the interests, desires, beliefs, and convictions of each group, following the logic of post-truth in the contemporary moment. Therefore, the belief or disbelief concerning the reported phenomena is related to the convenience, or inconvenience, of those that challenge them. This “negationism” of the right-wing group was also observed during the Covid-19 pandemic (Giacomozzi et al., 2022; Rozendo et al., 2022) when occurred an informational polarization about the virus (Justo, Bousfield, Giacomozzi & Camargo, 2020).

The comments of Internet users who directly or indirectly expressed their opposition to the current government linked the fires in the Amazon to the relaxation of environmental policies adopted by the current government. They agreed with the information contained in the news and the relationship between the fires and the darkening of the sky in São Paulo. Despite actively participating in the polarized debate, it was not possible to define a political and/or ideological line in this group. What is possible to indicate about this pole of the commenters is that they grouped around the opposition, rejection, and repudiation of President Jair Bolsonaro, as well as his followers.

Besides the aforementioned discursive elements, commenters who expressed support for President Jair Bolsonaro took on other characteristics of the extreme right, such as anti-democratic activism; violent speech, and the inferiorization of minorities and social movements (Lima, 2019). In turn, the group of opponents of the president referred to the group of supporters with pejorative terms, mainly as “bolsominion” and “minion”. According to Silveira (2018, the first term is the union of two bases, the first “bolso” and the second “minion”. The first base comes from Bolsonaro’s surname, with which he was nicknamed during his election campaign, “Bolso”. The other base, minion, means “henchman”, “follower”, and “servant”, an idea that was illustrated in the film “Minions”, in which the yellow millenary beings have a mission: to serve the greatest villains. “In this way, a *bolsominion* would be that person who is a servant, created by Bolsonaro, one that supports him and all his actions” (Silveira, 2018 p. 14).

Bolsonaro’s followers, on the other hand, anchored the opposite pole in matrices of references associated with political groups already quite crystallized in social thought. The “left” and “communism” were the main figurative nuclei found, expressed in terms such as “left”, “leftist”, “lefty”, “communist” and “commune”. Less frequently, this group was also associated with the Workers’ Party

(PT), through terms such as “petralha”, “petralhada” and “petista”. It should be noted that such terms are associated with derogatory and negative images in the contemporary culture in Brazil, probably due to the corruption scandals associated with the previous governments of the Workers’ Party, which is considered a left-wing party, in the country (Gomes & Medeiros, 2019).

Besides the pejorative intention inherent in the term “bolsominion”, there is a process of personification of the group around the image of President Bolsonaro. For Moscovici and Hewstone (1983), personification is a sub-process of objectification where there is an association of abstract objects to the image of people. According to Smith (2009), personification occurs due to the action of the media

that links specific images to certain themes. According to Höijer (2011), these characters start to express the characteristics of a phenomenon or a group. For example, Freud personifies psychoanalysis, and Ghandi, pacifism. Jair Bolsonaro, in turn, starts to represent his followers in a very important way, what he says, automatically becomes true for the group that follows him.

This process of personification of the extreme right in the figure of Jair Bolsonaro also reveals that the current president becomes the main national reference associated with this political group, being compared by opposing Internet users with other more well-known figures and groups, such as “Hitler”, “Nazism” and “fascism”, now also represented by “bolsominion” and “bolsonarista” (Figure 1).

FINAL CONSIDERATIONS

The present study demonstrates that the polarization and controversies surrounding the SR regarding the fires in the Amazon region occurred around the figure of President Jair Bolsonaro. The division between followers based on the president’s speeches – and on opponents, based on scientific consensus – undermines the debate on the preservation of the Amazon (“Todas as declarações de Bolsonaro”, 2020). In this case, polarization diverts the focus from the discussion, not producing results expected by popular participation in debates of interest to society. The debate practically became a political dispute, eroding the possibility of participants’ engagement in the construction of productive ideas for

solving the problem. The lack of disclosure regarding the fires in the Amazon region, by the mainstream press, is also a problem to be considered, having provided powerful fuel for the negationist arguments conveyed in the comments.

Finally, it is recognized that no analysis of comments on the social network will do justice to the totality of the heterogeneity of the positions and arguments of a community or a country about the theme studied, as in this case of fires in the Amazon, however, we consider it was important to examine how Internet users’ voices in opposing groups construct explanations and SR about the topic on the Internet.

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Data availability statement

The author authorizes the disclosure of research data.

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