# Environmental journalism and the struggle against disinformation in Brazil: navigating digital hostility and climate crisis coverage

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This study investigates how Brazilian journalists covering socio-environmental issues are affected by disinformation campaigns linked to far-right populism and lobbies opposing environmental protection. Based on in-depth interviews with 14 professionals specializing in environmental reporting, it analyzes how they perceive the digital hostility aimed at delegitimizing journalism and science. Although they do not feel silenced, participants report frustration and difficulties in responding to manipulative narratives. The accounts suggest that environmental coverage has become a field of symbolic dispute, particularly during the Bolsonaro administration, making disinformation a structural problem that affect daily journalistic routines. Strategies such as investigative reporting that expose economic interests, empathetic storytelling and the use of accessible language without falling into partisan disputes are seen as ways to confront this scenario of information disorder.

KEYWORDS

anti-media movement, Bolsonaro, Brazil, disinformation, environmental journalism, right-wing populism

## 1 Introduction

During the right-wing administration of President Jair Messias Bolsonaro (2019–2022), attacks on the media were intensified and widely disseminated through digital platforms. In addition, among the many falsehoods spread by Bolsonaro and his supporters, disinformation was primarily directed at science (particularly during the COVID-19 pandemic), the economy, and the environment, making this period especially challenging for journalists (Barsotti, 2023). Although Bolsonaro's authoritarian government has ended and the former president has been convicted for orchestrating a plot to overturn the 2022 election results, which brought left-wing leader Luiz Inácio Lula da Silva back to power, Brazil remains deeply polarized.

In recent years, right wing populism has gained prominence across several countries, including the United States, Hungary, India, Britain and Argentina. This article does not aim to discuss the causes of this rise, which reached a turning point in 2016 with Donald Trump's election and the approval of Brexit in the UK. Instead, the focus is on the impact of a hostile environment toward journalists covering environmental issues. To frame this discussion, it is important to outline how populism is understood here. Although there is no single definition, Tumber and Waisbord (2021) describe populism as a political movement that reflects the crisis of liberal democracy and challenges core democratic values, including freedom of the press and government accountability. According to the authors, the ascendance of this movement has been accompanied by an "irrationalism in public communication," illustrated by the spread of false information (p. 1). Consistent with populist strategies, Bolsonaro portrays opponents, including journalists, as enemies of the nation (Waisbord, 2018a). His anti-science

rhetoric became especially evident during the COVID-19 pandemic, when he promoted unproven treatments and fueled distrust in mass vaccination, in the World Health Organization and in his own public health officials (Arruda Castro and Reich, 2024).

Politicians who disseminate lies have always existed, but the consolidation of social media has profoundly changed the rules of the democratic game. Ituassu situates Bolsonaro within a group of Latin American leaders who achieved rapid political prominence through the strategic use of digital platforms, such as Nayib Bukele (El Salvador), José Antonio Kast (Chile), Rodolfo Hernández (Colombia), and Javier Milei (Argentina). These politicians operate at the margins of democratic conventions by adopting a form of politics that is "digital, radical, emotional, and hybrid" (Ituassu, 2025, p. 52). Therefore, it is no coincidence that the emergence of contemporary populist leaders is linked to new forms of disinformation (deliberate dissemination of false information) and misinformation (unintentional spread of incorrect information).

This configuration is closely linked to the systematic production of a hostile environment for journalists. Furthermore, to comprehend the contemporary media landscape in Brazil, it is essential to note that social media platforms have overtaken TV and print as preferred sources of news consumption (Newman et al., 2025). The national context is characterized by the predominance of Meta platforms, particularly WhatsApp and Instagram, followed by Google (Internetlab, 2025).

Even after the former president's departure from office, studies indicate a normalization of extremist ideas, suggesting that the "toxic mix of Bolsonarism has been incorporated into the political mainstream" (Silva et al., 2025, p. 372). The National Congress elected in 2022, and many City Halls are controlled by conservative politicians that can be defined as right-wing or extreme-right wing. In contexts marked by strong ideological divisions, scientific issues often become contested subjects (Waisbord, 2023).

Against this backdrop, this study draws on a growing body of research on environmental journalism, far-right populism, and climate disinformation, focusing on the Brazilian case as an example of how these tensions intersect. Previous research has examined the evolution of environmental reporting as a distinct beat, highlighting its role in fostering public engagement despite persistent limitations (Bueno, 2007; Girardi et al., 2020; Loose and Belmonte, 2023). Scholars have also discussed how journalism more broadly is under pressure amid profound transformations in the media industry driven by digital disruption (Painter, 2019). In Brazil, the convergence of anti-press and anti-science rhetoric has posed additional challenges to environmental and climate communication. Drawing on discourses from Brazil's military dictatorship, including nationalist claims about supposed international threats to the Amazon, Bolsonaro denied the occurrence of fires in the Amazon, while his supporters used digital platforms to discredit factual reporting on issues such as deforestation and global warming (Barsotti, 2023; Regattieri, 2023).

As Waisbord (2018a,b) reminds us, lies are not limited to state and corporate maneuvers, but are spread by a mix of powerful actors. While much of the existing scholarship centers on analysis of media content, this study foregrounds the perspectives of journalists themselves. The objective of this research is to examine on the experiences, perceptions and responses of journalists working on the front lines of environmental reporting. Through in-depth interviews with professionals covering some of the most pressing issues of our times, it investigates how they perceive and navigate overlapping challenges intensified with the rise of far-right movements in Brazil. The study conceptualizes false information about science and the environment as an ongoing and normalized challenge that alters how journalists understand their roles, rather than an episodic phenomenon. It also brings new insights into how journalists imagine strategies of resilience amid digital hostility against those who produce content that intersects with political disputes and economic interests.

The next sections contextualize the research. It begins with an overview of the evolution of environmental journalism in Brazil, followed by a discussion on the rise of right-wing populism and its impact on public discourse, with a focus on anti-media and anti-science rhetoric. The third section explores how these dynamics contribute to the spread of climate disinformation in a politically polarized environment that deeply affects journalists' practices.

## 1.1 The evolution of environmental journalism and the field in Brazil

In the US, the creation of systematic assignment of environmental stories can be traced back to the 1960s, following a growing public interest in the topic, which increasingly captured public attention after each dramatic event (Neuzil, 2020), such as the Santa Barbara oil spill (1969) and the nuclear accidents at Three Mile Island (1979) and Chernobyl (1986). The Society of Environmental Journalists was launched in 1989, in Washington, consolidating the environment as a specialist news beat. Towards the end of the 20th century, the field matured, incorporating more complex reporting beyond event-driven pollution stories (Hansen, 2020). However, the evolution of environmental journalism entails relevant differences across different parts of the world as it is necessary to consider the political, economic and media regional contexts together with the technological transformations that have led to drastic shifts in communication paradigms.

Held in Rio de Janeiro in 1992, the United Nations Conference on Environment and Development, also known as Rio-92, Eco-92 and Rio Earth Summit, was a turning point for environmental journalism in Brazil (Loose and Belmonte, 2023). At the time, Brazilian journalists working on environmental issues began to be identified either as environmental journalists, influenced by the tradition of science journalism in the United States, or as eco-journalists, whose work was more closely aligned with environmental activism (Girardi et al., 2020). The decline in the use of this latter term reflects a shift towards a more comprehensive view of environmental issues, which are increasingly recognized as social, political, and economic in nature.

Prior to Rio-92, although media coverage of nature related topics had followed the growing visibility of the ecological movement, environmental journalism was not yet recognized as a distinct beat. Rather, it was treated as a sub-area within science journalism (Belmonte, 2017). There is a consensus among scholars that it was only after the 1992 conference that environmental journalism emerged as a consolidated specialization in Brazil. The Brazilian Network of Environmental Journalism was founded in 1998. Notably, discussions about sustainable development began to be widely incorporated into media coverage (Loose and Belmonte, 2023).

In theorizing environmental journalism practiced in Brazil, Bueno (2007) identifies three core functions: informational,

pedagogical, and political. The first relates to the need to keep the public informed about how environmental issues affect citizens' daily lives. The second concerns the causes and potential solutions to environmental problems, while the third involves civic mobilization and holding power to account. For Bueno, environmental journalism must be politically engaged. He adds: "Environmental journalism does not belong to those who hold a monopoly over speech but must be intrinsically attuned to pluralism and diversity" (p. 36). Ideally, it also requires a systemic and in-depth approach that connects the central topic of a story to broader natural and social issues, going beyond a narrow event-driven approach (Girardi et al., 2020). Kovarik (2020) argues that "environmental problems are associated with, and not separate from, issues of poverty, human rights, and under-development" and are often linked to "the legacy of colonialism, exploitation and racism" (p. 52). It is, therefore, a practice that demands critique and challenges to the status quo.

Nonetheless, Girardi et al. (2020) acknowledge the difference between the normative and conceptual characteristics of environmental reporting, conceived as a systemic practice grounded in the plurality of voices, and the realities of the contemporary media industry, which is in a permanent state of flux. With nearly 90% of the population online, Brazil stands out as a highly digitally connected country (IBGE, 2025). As in other parts of the world, the digitalization of news has brought significant challenges to media organizations, including disrupted business models, shrinking newsrooms and an increasing demand for content tailored to social media, aimed at viral sharing (Daros, 2025). Painter (2019) identifies four of the most significant obstacles persistently affecting journalism: the radical transformation of the communication ecosystem brought about by digital media; financial instability; information overload; and the credibility crisis, driven in part by the spread of so-called fake news.

While dissatisfaction with formal institutions has always existed, with the transformation of the media system these criticisms have intensified. Ituassu argues that before the consolidation of digital media, journalism sought to address the largest possible share of the public. With the decentralization of content production, a more segmented and radical communication environment emerged, encompassing a diversified range of sources and political actors. This shift put pressures on formal institutions, including traditional media organizations, and on democracy itself (Ituassu, 2025).

Before moving on to the discussion of disinformation, which is directly related to the central focus of this study, it is important to highlight that financial constraints in the media industry have impacted all areas of journalism that require time-consuming and in-depth reporting, and environmental journalism is no exception. Whereas it is a consolidated beat in several countries in the Global North, environmental journalism in the Global South faces specific challenges. With shrinking newsrooms across Latin America, media companies encounter significant barriers to publish environmental stories, which can be costly to produce. Specialized reporting entails expenses such as travel and interviews in hard-to-reach locations (Holanda et al., 2022). To avoid these costs, environmental coverage is frequently simplified or fragmented. Moreover, reporters must deal with safety risks when working in regions marked by conflict. Added to this is the lack of investment in training journalists to properly cover environmental issues, which means that the number of specialized reporters remains low (Koop, 2020).

Nonetheless, environmental journalism in Brazil has matured in recent years and coverage of environmental issues has gained momentum due to the increasing frequency of extreme weather events (Loose, 2025). Furthermore, new independent spaces for the coverage of socioenvironmental issues have emerged in Brazil. Digital native media have been helping to diversify the perspectives and to amplify the voices of communities that are underrepresented in the mainstream media (Loose, 2024). However, alternative media outlets that operate independently from major media corporations also face obstacles to environmental coverage, such as limited financial resources and a dependence on grants from international foundations (Sarmento, 2023). Overall, Loose (2025) observes an evolution in environmental journalism, but the lack of long-term programs hinders the training of specialized journalists, while an economic-driven news agenda facilitates the spread of greenwashing messages.

## 1.2 The climate crisis in the media

By 2009, the volume of climate coverage was already five times greater than at the turn of the millennium, positioning media representations as key elements in shaping public understanding of science, the everyday impacts of global warming, and the development of related public policies (Boykoff, 2011). Across Latin America, the topic has become far more visible over the past two decades (Koop, 2020). As Hackett et al. (2017, p. 2) argue "climate change is a crisis in a dual sense." It disrupts nature and threatens human habitats, but it is understood as a crisis only when it is represented as such, and thus journalism plays a key role to inform citizens and to influence public policies.

The structural problems associated with predatory economic development in the Global South, such as unrestrained urban growth and the suppression of ecosystems, intensify the impacts of climate change in countries like Brazil (PBMC – Painel Brasileiro de Mudanças Climáticas, 2016). It is beyond the scope of this section to delve into the limitations of journalism in sustaining coverage of a complex, cross-cutting, and enduring crisis. Rather, the aim is to underscore that the climate crisis constitutes an arena of narrative contestation, closely linked to global inequality. As Callison (2023) notes, framing climate change as a crisis can help capture public attention, but the resulting sense of urgency may also obscure broader questions of power.

With a focus on the Brazilian media landscape, Loose (2024) highlights that climate change is not a neutral phenomenon, but a "discursive construction shaped by the interests of different groups, marked by competing ideologies and continuous struggles for power" (p. 220). Miguel and Aristides (2024) argue that, although social media provide fertile ground for the spread of disinformation, it also offers important opportunities to frame the climate crisis in relation to broader issues of social justice. As mentioned earlier, digital media platforms that operate independently of traditional news outlets, and are not constrained by the commercial logic that shapes mainstream content, prioritise alternative narratives to mobilise society and amplify marginalised voices. For instance, an analysis of Greenpeace Brazil's coverage of the floods that severely affected the southern state of Rio Grande do Sul in 2024 reveals how the organisation employed interactive and immersive storytelling to help explain and contextualise the extreme weather event (Miguel and Aristides, 2024).

While Greenpeace is an activist organisation, there are also emerging journalistic initiatives driven by socio-environmental concerns that do not self-identify as activist (Sarmento, 2023). Loose and Belmonte (2023) highlight specialized news platforms such as *O Eco*, *Conexão Planeta*, and #Colabora as key examples of these emerging digital players thar are helping to broaden environmental debates in Brazil. These new players indicate that research on environmental communication should not be confined to the output and practices of mainstream news media alone. Environmental journalism in Brazil has developed into specific forms of production, ones that have an alternative view of the environment and understand it as an issue of public interest, quite opposite from a neutral position. In that sense, there is now an emphasis on the political function of environmental journalism, understood as its ability to mobilize the public (Loose and Belmonte, 2023). Whereas environmental journalism in Brazil has expanded, its development has taken place within an increasingly hostile political and informational landscape. One of the reasons for this hostility is the rise of right-wing populism personified by Jair Bolsonaro's presidency.

## 1.3 The rise of right-wing populism: the impact of anti-media and anti-science digital campaigns

Populism can take different shapes, though there is a scholarly agreement that all forms share anemphasis on speaking for 'the people' and a rejection of 'the elite' (Mudde and Kaltwasser, 2017). Populist politicians tend to present the following core characteristics: the notion that the interests and views of ordinary citizens are the moral center of politics; anti-elite and anti-establishment attitude; the portrayal of 'the people' as a unified group which they claim to represent; the framing of political discourses through the lens of crisis and opposition to neoliberal ideology (Rooduijn, 2013; Gerbaudo, 2018). Importantly, populism's premise of "pure people" against "evil elites" is a performative strategy, or a "political fantasy" that populist leaders explore, as Waisbord (2018a) argues, to guarantee "business as usual" (p. 26). While claiming to serve the people, they govern alongside powerful economic groups, reinforcing rather than fighting structures of power.

Latour (2020) defines the current wave of populism as a contemporary phenomenon strengthened by Donald Trump's election, which identified immigrants as the enemy. Another common characteristic of most right-wing parties is the denial of anthropogenic climate change and a rejection of climate policy measures, as illustrated by Bolsonaro. At this point, the discursive contradiction also becomes evident. Climate denialism benefits economic elites and is driven by the interests of extractive sectors, such as the oil industry, as well as those invested in maintaining a system grounded in the destructive exploitation of nature (Haas, 2023).

Moreover, different studies describe an affinity between social media and the rise of recent populist movements (Gerbaudo, 2018; Ituassu, 2025; Tumber and Waisbord, 2021; Waisbord, 2018a). For Tumber and Waisbord (2021), digital media ecosystems "are conducive to the kind of polarized, anti-rational, post-fact, post-truth communication championed by populism" (p. 1). While democratic politicians accept debate, populist ones assume a representation of an uncontested truth (Mueller, 2019). In addition to this, populists often

challenge media monopolies and, when in power, become omnipresent (de la Torre, 2021). Waisbord (2018a) argue that the elective affinity between populism and post-truth communication lies in the rejection of truth as a shared normative principle. For populism, facts are not unquestionable. Rather, they are "subsidiary to narratives" and shaped by ideologies (p. 25). In that sense, social media offer an ideal channel for the dissemination of deceptive content.

Althought this article does not aim to detail the different types of false information, the term most commonly used in communication studies is 'disinformation' due to its broad scope, which also encompasses more specific terms such as 'fake news', that replicates the traditional news format (Chinazzo et al., 2025; Tandoc et al., 2018). Neither disinformation, misinformation nor fake news are new. What has changed, with the consolidation of social media, is the way in which it is disseminated with an unprecedented speed of difusion (Martín García and Buitrago, 2023). Through digital media, disinformation can potentially target an audience of billions of citizens, who in turn, redistribute false narratives. Such process creates an environment of post-truth, or "a situation of confusion and pervasive lies" (Tumber and Waisbord, 2021, p. 15). In addition, "due to the configuration of the contemporary information (dis)order, it is harder to disintangle truths from lies" (ibid, p. 15).

Right-wing supporters are against what they define as media elites and use digital platforms to bypass traditional gatekeepers, communicating "without filters" (Durazo-Herrmann et al., 2021, p. 525). Their messages, always anti-pluralist, are disseminated directly to ordinary citizens, amplifying society's fears (Gerbaudo, 2018; Mangerotti et al., 2021; Tumber and Waisbord, 2021). In the case of Brazil's 2018 presidential election, Bolsonaro and his supporters exploited the notion of a chaotic nation marked by urban violence, corruption and the threat of communism (Levy and Sarmento, 2020; Mangerotti et al., 2021).

While deceitful information wrapped as news is an old propaganda strategy, right-wing defenders have also weaponized the term fake news to attack media organizations through social media platforms, as it has been widely documented mainly during Donald Trump's first mandate. Mirroring Trump's strategies, Bolsonaro embarked on a war against media and consequently against journalists since his first campaign for presidency. An analysis of then-candidate Bolsonaro's Twitter account during the 2018 presidential election reveals that his campaign was grounded in narratives targeting mainstream media organizations and the press, depicted as widely biased (Mangerotti et al., 2021). Rêgo and Barbosa (2020) situate the proliferation of fake news within the broader context of the rise conservative movements, leading to "a process of collective production of ignorance" (p. 94).

Bolsonaro frequently accused journalists of spreading fake news and personally insulted media professionals. By portraying himself as a political outsider who represented the will of a supposed majority, he positioned himself not only against corporate media but also against democratic institutions, labelled and dismissed as part of the establishment. His supporters used social media to stir emotions and simultaneously foster a sense of confrontation, or an "us versus them" framing (Viscardi, 2020, p. 1139). Ituassu et al. (2019) propose the notion of hipermediatization as a paradigm to understand digital political communication in such kind of polarized electoral context.

Not surprisingly, during Bolsonaro's term hostility against professional journalistic practices intensified. As described by

Waisbord (2018a), critical opponents, such as reporters, intellectuals, judges and human rights activists are derided as enemies of the people by populist politicians. In tweets, Bolsonaro and his three sons attacked the press in general, accusing journalists of spreading fake news; targeting specific media outlets, labelled as leftist; and professional journalists, including through personal insults (de and da Fonseca Oliveira, 2022). Importantly, Goulart et al. (2025) point out that the far right in Brazil is a diverse political group, composed of institutional and non-institutional actors active on social media and united by an agenda that includes heterogeneous values such as the defense of the family, militarism, and aversion to the Workers' Party. The authors show that while state agents attack the press also using official communication channels, non-institutional actors, such as religious activists and right-wing influencers, carry out even more frequent attacks on journalists and media organizations through hyperpartisan digital channels.

Waisbord (2018b, 2023) suggests interpreting the large-scale dissemination of false information as a symptom of fragmented, chaotic contemporary public communication, adding that anti-scientific arguments are an inevitable outcome of this information disorder. Under Bolsonaro's logic of digital and rage-driven populism (Viscardi, 2020), anti-media and anti-science rhetoric are interconnected as part of a broader strategy to hijack public discourse and undermine the credibility of fact-based sources. There is evidence that in politically polarized environments, disinformation and misinformation about science spread more easily, a pattern that can be facilitated by the rise of bots and trolls on social media (Levy et al., 2021).

During the COVID-19 pandemic, it became clear how Bolsonaro's government consolidated a communication campaign to discredit gatekeepers and conventional sources of knowledge. His antagonism towards public health experts, distrust of mass vaccination and rejection of containment measures gained broad media visibility. While Brazil's administrative state demonstrated resilience by resisting attempts to undermine its policy autonomy throughout the pandemic, the president's anti-science rhetoric revealed the country's vulnerability to attacks on the foundations of expert knowledge (Arruda Castro and Reich, 2024). Following the guidelines of the Trump administration in the outbreak of the pandemic, and evoking 'God's help', the Brazilian right-wing leader disregarded the World Health Organization's (WHO) recommendations and promoted the use of the drug chloroquine as an effective treatment. While science deniers dismiss well stablished scientific evidence, pseudoscience is based on questionable evidence portrayed as reliable knowledge. As Harman et al. (2025) put it, "pseudoscience is based on organized misinformation, where arguments are made to confuse issues and leave people feeling like they are unable to decide" (p. 2). His supporters embraced the discourse against stablished scientists framed as corrupt and underprepared, and enforced the image of chloroquine "as a remedy for poor" (Fonseca et al., 2022, p. 18). Science was turned into a political wedge, deeply affecting journalists trying to navigate overlapping crisis (Waisbord, 2023).

## 1.4 Climate disinformation in a context of political polarization

These patterns of disinformation and institutional delegitimization have not only affected public health and media organizations but also

laid the groundwork for resistance to climate science and policies to tackle environmental problems. Despite unequivocal evidence that humans are altering the planet's climate, scholars in science and technology studies, as well as journalists, agree that communicating this change is far from straightforward, as it requires more than the accurate dissemination of scientific facts. Various segments of society deny global warming for political and ideological reasons (Lewandowsky et al., 2019). Therefore, the environmental crisis demands approaches that facilitate the understanding and representation of the complexities of climate changes for diverse audiences (Zehr, 2024).

Lewandowsky (2021) identifies three main drivers of climate skepticism and denial. Firstly, mitigating global warming requires cutting greenhouse gas emissions through measures that challenge worldviews rooted in free-market economics. Secondly, the global rise of populism has reinforced not just opposition to institutions perceived as elite, such as media organizations and research centers, but also the spread of conspiracy theories. Conspiratorial rhetoric undermines the scientific consensus on climate change by suggesting that scientists are driven by hidden agendas. The third driver of climate skepticism is the influence of elite cues, that is, messages from trusted political and media figures that shape public opinion. For Latour, the climate crisis indicates that the project of modernization has failed, and our lifestyle is no longer sustainable. The denial of this collapse emerges as political project or as a reaction of those who do not accept the failure of ideals associated with globalization. To deny the "new climatic regime" is to lie, according to Latour (2020, p. 32).

In such a confrontational and polarized informational environment, exacerbated by the logic of digital platforms, false information about environmental issues spreads more easily (Cruz et al., 2025). The literature, which remains largely centered on Global North contexts, confirms that climate disinformation often originates from networks funded by corporate or philanthropic actors with vested interests and is amplified through an echo chamber of influential figures such as politicians, media professionals, and bloggers (Treen et al., 2020).

In Brazil, a country that holds the largest part of the Amazon rainforest, land use change, especially associated with deforestation, alongside agricultural and livestock production, accounts for approximately three quarters of the country's greenhouse gas emissions (Loose and Carvalho, 2024). Brazil has become a major global power in agribusiness, particularly through meat and agricultural exports. Whilst sustainable practices are improving, there is consensus that the expansion of agribusiness is directly linked to deforestation. During Bolsonaro's administration, the large-scale dismantling of environmental protection policies led to an unprecedented increase in erasure of forests landscape, as widely reported by different media organizations.

The then president dismissed such policies as an obstacle to economic development and actively intensified extractivism irrespective of environmental costs, radically altering Brazil's environmental governance (Menezes and Barbosa, 2021). Anti-environmentalism entails attacks on defenders of environmental protection, including scientists, NGOs, and communities directly affected by uncontrolled land occupation, such as Indigenous peoples and *quilombolas* (traditional Afro-Brazilian communities). Far-right supporters portray environmental defenders as barriers to economic activity, framing devastation as acceptable and necessary for

economic development (Menezes and Barbosa, 2021). Bolsonaro's nationalist discourse also framed struggles for social and environmental justice as a threaten to national sovereignty in the Amazon, exploring conspiracy theories and encouraging the nationalistic ideology of "The Amazon is ours" (Gagliardi et al., 2021, p. 156).

Mapping of disinformation narratives across digital platforms in the Brazilian media ecosystem reveals different strategies to downplay the impacts of climate change. These include campaigns to falsely depict agribusiness as the country's major economic sector and efforts to delegitimize organizations and social movements that advocate for environmental legislation (Laboratório de Estudos de Internet e Redes Sociais, 2024). According to the same study, far-right political figures play a key role in disseminating such disinformation and use their positions of power to gain media visibility and insert false claims into mainstream news coverage.

Within this political context, which is unfavorable to narratives about the urgency of the climate crisis and other environmental concerns, journalism focused on this field faces a series of challenges. As Hackett et al. (2017) argues, the "climate crisis is not just a matter of environmental degradation, but also of political and communicative capacity" (p. 188). In Brazil, the political landscape remained highly polarized after the election of Luiz Inácio Lula da Silva, leader of the left-wing Workers' Party (*Partido dos Trabalhadores*), in the 2022 presidential race. As in other parts of the world, new fact-checking practices have been incorporated into journalistic routines. In today's news ecosystem, journalists have lost the ability to determine what qualifies as news amid highly online partisan discourse, and facts themselves have become subject to interpretation based on political views and personal beliefs (Graves, 2016).

As an example of how such polarization also becomes evident in the face of emergencies, studies have shown that the wide circulation of false content marked the biggest climate disaster in the history of the southern state of Rio Grande do Sul, in 2024. The state was hit by heavy rainfalls and floods affected almost every city. During the tragedy, politicians, influencers and websites linked to the right spread disinformation to attack and undermine the credibility of the left-wing Lula's government (NetLab, 2024). In addition, the study identified other axes of disinformation, such as denying the connection between the floods and climate change; linking the tragedy to conspiracy theories; exaggerating the role of right-wing allies in the crisis response; and exploiting the disaster through self-promotion.

## 1.5 Research questions

This literature review has shown a growing body of research examining the intensification of anti-media and anti-science narratives as well as orchestrated disinformation associated with the rise of right-wing populism, alongside a fragmentation of the digital media ecosystem, a trend that Brazil mirrors. However, there is room to explore journalists' own perceptions and their views on this information disorder. Interviews with Spanish journalists about their perceptions of disinformation reveal a shared understanding that propagators of false content through social media cannot be completely eliminated, but their impact can be mitigated by credible journalism (Martín García and Buitrago, 2023). Journalists highly

value the work of fact-checkers, yet acknowledge the challenge of reaching individuals that prefer content that merely confirms their beliefs.

Complementing these insights, Tandoc et al. (2018) argue that news organizations regard fake news as a social problem. They interpret it as a consequence of the rise of social media and as a phenomenon primarily driven by ideological motivations, and occasionally by financial interests. Interestingly, the study, which examined journalism in the United States, suggests that although news organizations view fake news as a novel byproduct of social media, they tend to respond using traditional approaches, adhering to established conventions of responsible journalism. Interviews conducted with British and Australian journalists to capture their perceptions and reactions to the proliferation of disinformation also revealed a contrast. On the one hand, they demonstrate concern about growing attacks and hate directed at journalists, but on the other they reaffirm confidence in the value of journalism as a public service (Schapals and Bruns, 2022).

Extending these insights to Brazil, Christofoletti and Becker (2025) show that a majority of journalists (92.4%) report a decline in the field's credibility. Respondents acknowledge that the public no longer trusts journalists as they did a decade ago, attributing this shift to the rise of non-journalistic information channels fueled by factors such as proximity and spontaneity, which are characteristic of social media.

While previous studies have addressed journalists' perceptions of information disorder in different national contexts, the literature offers limited insights into how environmental journalists, particularly in Brazil, interpret and navigate these pressures in a context of digital hostility. This gap is significant because environmental reporters work under unique political, economic, and discursive constraints in the country. To address this gap, the present study is guided by the following research questions:

> *RQ1*: How do journalists in Brazil experience and interpret the presence and impact of disinformation in their coverage of environmental issues?

> *RQ2*: What strategies do they adopt to counter environmental disinformation while maintaining journalistic integrity and audience trust?

## 2 Materials and methods

Building on literature that discusses a context of digital hostily, this study employs a qualitative approach to examine how journalists interpret and respond to these challenges. The research draws on interviews with 14 Brazilian professionals who cover topics such as climate change, environmental crimes, the sustainable economy, and Indigenous rights, among others that reflect the intersectional nature of environmental problems. Semi-structured interviews were chosen as the qualitative method due to its flexibility to change the sequence and form of questions in order to follow up on participants' interpretations (Kvale, 2007).

The analysis presented here forms part of a broader postdoctoral research project on environmental communication and climate crisis coverage in Latin America. To specifically address the two research questions previously presented, theoretical work on the evolution of

environmental journalism was combined with literature on the rise of far-right populism in Brazil, personified by former president Jair Bolsonaro, and on the growing phenomenon of disinformation.

## 2.1 Participants and data collection

Starting from the researcher's personal network, 14 professionals, including reporters, editors and photographers, were interviewed between January and October 2025. All of them have at least one decade of experience in environmental coverage, and some of them are award-winning individuals. The focus was on specialized professionals, which naturally limited the size of the sample, but the number was determined by the point of saturation (Kvale, 2007).

Nevertheless, aiming to capture diverse professional and regional experiences, and considering the dimensions of the Brazilian territory, the selection included participants working in four of the country's five regions. A portion of the interviews was conducted face to face in Rio de Janeiro (six interviews), while the remaining ones took place online (eight interviews), lasting between 40 and 90 min. The respondents include professionals from both legacy and independent media outlets, that is, organizations that offer alternatives to mainstream journalism (Atton and Hamilton, 2008). The high concentration of professionals based in the Southeast is justified by the fact that Rio de Janeiro and São Paulo are the states with the largest number of media organizations. However, since these are specialized professionals, they frequently travel across the country to produce their stories. A summary of interviewees' profiles is presented in Supplementary Table 1.

Interviews were conducted in Portuguese, participants' and the researcher's native language. They were informed that the conversations would be digitally recorded, and consent was obtained either in written form or, in three cases, verbally (also recorded). Interviewees were assured of confidentiality. All respondents were anonymized in the transcripts and subsequent analysis to protect their identities. Institutional ethical approval was granted, and all data are securely stored in accordance with institutional and GDPR requirements.

Interviews were guided by a semi-structured script, with predefined questions, covering participants' professional trajectories, their views on environmental journalism and its evolution in Brazil, the challenges of reporting on the climate crisis, and their experiences with audience engagement. Additional questions were tailored to each participant's role and media context. The interview script did not include direct questions about far-right populism, anti-media campaigns, the Bolsonaro administration or specific political actors, leaving room for respondents to elaborate on their perceptions of the polarization of environmental debates. In some cases, disinformation emerged spontaneously as an increasing challenge linked to the political polarization, while in others, specific questions were introduced to explore participants' views on the topic.

This study was conducted in accordance with the Minimal Ethical Risk Guiding Principles of the College Research Ethics Committees (CREC), "where traditional written consent is not obtained, researchers must be able to demonstrate that informed consent has been obtained (e.g. through audio-recorded or transcribed verbal consent)". Accordingly, while most participants provided written consent, three participants provided verbal informed consent, which was audio-recorded due to practical difficulties in signing the electronic consent form. This study followed King's College London's Minimal Risk Research ethics pathway, which does not involve review by a named ethics committee. Ethical clearance was granted through this institutional process under registration confirmation reference MRA-24/25-46497. The research was classified as minimal risk, as it involved voluntary interviews with adult participants, posed no foreseeable risk of harm, and all data were anonymised.

## 2.2 Data analysis

Thematic analysis was conducted in six stages following Braun and Clarke's (2006) guidelines, although the authors point out that the process should be seen as a general guide, rather than a rigid step-by-step manual: familiarization, coding, theme generation, review, definition, and writing. The analysis began with repeated readings of the transcripts, during which the researcher added analytic memos to manually and inductively identify initial codes. The transcripts were then uploaded to NVivo 15 software, which facilitated the identification of recurrent patterns and the labelling of text segments into categories. This systematic approach to coding is also supported by Saldaña (2009, 2011), who emphasizes the importance of developing data intimacy as researchers gather and manage material.

Moving to the phase of theme generation, codes were refined and grouped in a more interpretative manner. This is in line with Braun and Clarke's (2021) reflexive thematic analysis. The authors argue that it is necessary to move beyond descriptive codes that emerge from the data in order to identify broader themes as patterns of meaning that could be conceptualized, combining a rigourous coding process with reflexivity. While the wider project generated additional themes concerning professional practices and experiences, this article focuses exclusively on themes addressing how journalists perceive (RQ1) and respond (RQ2) to disinformation and political polarization. This involved a continuous movement between the interpretation of the interviews and the literature on disinformation, political polarization and digital populism to define the final themes. As the analysis was conducted by a single researcher, validation of the qualitative findings was ensured through systematic documentation and continuous checking involving multiple revisions of the data.

The methodological process resulted in five main themes, which are discussed in the following section with the incorporation of quotes from the interviews translated into English by the researcher.

## 3 Results

Before discussing the themes, it is important to clarify a linguistic aspect of the data. All interviews were conducted in Portuguese, where the term *desinformação* (disinformation) does not differentiate between deliberate and unintentional falsehoods. The Findings section therefore reflects this broader use of the term. When the word disinformation was used by respondents it was encompassing both false and misleading information in general.

## 3.1 Disinformation as a structural condition of environmental journalism: "it's the wild west"

Interviewees described the dissemination of false or misleading information not as an occasional challenge, but as a structural condition that affects the everyday practice of environmental journalism. Although some participants mentioned isolated incidents in which themselves or colleagues were targeted by digital harassment, the spread of false or misleading content about environmental issues facilitated by social media was portrayed as a broader challenge. Across all interviews, participants defined disinformation in its many forms as a central and persistent obstacle to environmental reporting.

On the one hand, participants spoke about the growing recognition of environmental reporting and the increasing public understanding of the impacts of climate change. On the other, they referred to the normalization of disinformation and anti-science narratives. While references to the Bolsonaro administration as the most critical period are recurrent and will be further discussed, the following excerpts reveal a persistent sense of concern and fatigue or frustration among environmental journalists when facing issues such as attempts to discredit climate science or to deny the impact of climate change. As one journalist observed disinformation is no longer an occasional disturbance, but a professionalized and deliberate practice associated with political polarization in recent years:

> "When I started [to cover environmental issues] about fifteen years ago, there was already some disinformation, but not as much as today. Lying has now become a professional practice. Lying is part of the job for certain governments, like the Bolsonaro and the Trump administration. They do it deliberately, just like some fascist governments in the past. (…) Politicians who lie have always existed, but lying deliberately as a goal is something different, it's a very elaborate process. So now you have a much greater climate crisis, a much weaker journalistic structure, both in the mainstream press and in alternative media, and you have all this disinformation and denialism. And today the arena is social media, which no longer even bother with fact-checking. It's the Wild West." (Interviewee 2).

Another journalist emphasized the unequal struggle between evidence-based journalism and the rapid spread of false information that downplays the urgency of the climate breakdown and is amplified by sources with vested interests:

> "At the same time that we face the challenge of bringing the reality of climate change into people's everyday lives, we also have disinformation doing the opposite job and doing it with great efficiency. So, something that was already difficult has now become four times harder, because there is so much disinformation working against us. (…) Sometimes you communicate in a serious, scientifically grounded way, and then someone comes along, an influencer, not a journalist, and with charisma and a huge number of followers, manages to dismantle everything you've built with so much effort, research, study and listening to so many sources." (Interviewee 9)

While one participant (Interviewee 3) talked about the "despair" of facing climate deniers even among friends and relatives, another interviewee described the draining effect of dealing regularly with disinformation:

> "It contaminates everything. It drains your energy completely. The same thing happened during the pandemic, a different topic but affected by the same problem. You end up wasting so much time, yours and the reader's explaining what should be obvious, you know?" (Interviewee 1)

One journalist (Interviewee 8) said it has become increasingly difficult to identify false information coming from right-wing think tanks or sources with vested economic interests, which often present themselves as legitimate voices in environmental debates: "Most of the time, I can identify it. But not every time," the journalist said, also mentioning corporate greenwashing as a common practice.

All participants associated the increasing spread of disinformation with the broader politicization of environmental coverage in Brazil.

## 3.2 The environment as a political battlefield: "swimming against the tide"

Respondents' descriptions of their routines place environmental reporting at the intersection of competing political, economic and structural pressures to discredit or delay climate solutions. The following excerpts confirm that the challenges they face are not limited to organized disinformation campaigns including the use of bots and trolls. Rather, the responses associate political disputes with the spread of false information and reflect a complex ideological divide that has intensified with the rise of right-wing populism. As one journalist highlighted, addressing climate disinformation involves more than communicative challenges.

> "Ending climate denialism depends on many variables. It depends on the press, because the press can fuel climate denialism when it defends a false idea of neutrality. It also depends on public policy. (…) So, it's difficult, because it depends on society, and today we have a far-right movement that keeps growing. It's a struggle for territory, not for narrative. If the far right wins in Brazil, it means agribusiness without any kind of regulation, and environmental variables being ignored in development projects." (Interviewee 8)

One journalist working in a northern state in the Amazon region described how right-wing discourses portraying environmental protection as a barrier to economic development have become increasingly influential, as if the rainforest were the "enemy" preventing people from living a better life. The participant explained that these narratives vilify native Amazonian environmentalists, such as Chico Mendes, rubber tapper and activist murdered in 1988, and Marina Silva, Lula's Minster of the Environment and Climate Change:

> "In my state, the people who are winning [regional elections] are those who speak from the side of business. They are the ones who frame the forest and environmental concerns as obstacles to development, and who say that environmental policies are what make the state one of the poorest in Brazil, with some of the worst socio-economic indicators. They demonize figures like Chico Mendes and Marina Silva, blaming them for the region's lack of progress.

*These narratives, strongly promoted by the right, have gained significant traction among the population.”* (Interviewee 13).

According to a freelance journalist from the southern state of Rio Grande do Sul, which in 2024 experienced extremely heavy rainfall resulting in worst flooding in its history, navigating such a polarized environment while seeking to inform the public without being drawn into national and regional political disputes *“is like trying to swim against the tide”* (Interviewee 14). As highlighted in media reports, the mayor of Porto Alegre, the capital of the state of Rio Grande do Sul and a politician aligned with Bolsonaro, was accused of negligence during the crisis but responded by blaming President Lula da Silva's administration for the lack of resources, thus reproducing the right–left dichotomy amid a climate emergency.

Reflecting on why climate mitigation has become so susceptible to polarization, this veteran journalist described the political and economic disputes surrounding environmental protection and green initiatives as part of a broader “civilization crisis” that call for rethinking our way of life.

> *“It affects issues of consumption, production and profit. This generates polarization driven by an unwillingness to share.”* (Interviewee 11)

The statement captures how struggles over climate policies are also a matter over values of the modern life and the sustainability of human civilization, making it inherently inseparable from the political context.

## 3.3 Challenges experienced during the Bolsonaro years: “it was a campaign of threats”

The Bolsonaro administration (2019–2022) was described by all interviewees as a period of intensified hostility toward the press, and toward environmental reporting. While they do not report being silenced by the hostility, participants recalled episodes of public discrediting of their work, digital harassment, and, in one case, personal threats. Although their experiences varied depending on the nature of their professional activities, the perception of the far-right government as a turning point was a recurring pattern. For this journalist, the Bolsonaro years were a time of open hostility towards her stories about the environment:

> *“I was constantly threatened. It was a campaign of threats. I received death threats. Even some sources threatened me. There were lots of threats even though I work for a newspaper that doesn't take a passionate stance, you know? It's not a place where you can just have an opinion and publish it. There are many editorial rules.”* (Interviewee 11).

Another journalist, who used to write long feature stories on wildlife, said that the rise of the far right changed his focus, forcing him to cover public policy instead. He also joined a group of activists to denounce Bolsonaro's environmental policies:

> *“When Bolsonaro came to power, it was not possible to write just about animals. That suddenly felt naïve. I couldn't write about a*

*cute animal, while the guy was destroying the Amazon. You could still do it, but the format changed. You could write a profile about the pink river dolphin, for instance, but it would inevitably involve public policy, wrongdoing, criminality, all the things that weren't part of the story before. So, after Bolsonaro I started writing more about environmental legislation and climate issues. In a way, it was thanks to Bolsonaro that I delve into it.”* (Interviewee 7).

A reporter, who covers environmental violations in Indigenous areas, said a major turning point was the 2019 “Day of Fire,” when landowners and farmers in Pará burned forests to protest international pressure on Bolsonaro's government.

> *“It became clear that a political group, the same one that didn't believe in vaccination, also refused to believe that the illegal extraction of timber and minerals from Indigenous lands harms not only Brazil, but the entire planet. (…) What happened during that administration was deeply concerning, because you had the head of the Executive encouraging people do to illegal things, illegal mining, invasions. The Day of Fire was, for me, one of the most surreal events that ever happened.”* (Interviewee 4).

One editor summarizes how the combination of the COVID pandemic, environmental crisis and institutional disinformation deeply affected his team. He refers to the “firefighting cattle” narrative, a claim made by some of Bolsonaro's supporters that cattle could help prevent wildfires by eating dry vegetation:

> *“In 2020 and 2021, I saw my team's mental health collapse, and mine too. Those were incredibly difficult years, with the pandemic, record-breaking fires, everything at once. And on top of that, we had to deal with official disinformation, things like the so-called firefighting cattle. That was the level we were at. Since then, at least for our outlet, things have calmed down a bit. I don't think the amount of disinformation has decreased, on the contrary, but in the environmental field it's a bit less explicit. I think there's going to be another peak now, with Trump, and of course with next year's presidential elections in Brazil. It's going to be chaos.”* (Interviewee 12)

Other participants confirmed that with the end of the far-right government content spreading climate denialism, for instance, became rarer. Nonetheless, the hostility of that period created enduring barriers for the field and reshaped how environmental journalism is practiced in Brazil.

## 3.4 Barriers created by political polarization: divisive “bubbles”

Beyond the Bolsonaro years, as climate skepticism has become associated with a conservative political identity, most of participants observed that part of the audiences interprets environmental news, especially about climate emergency, through ideological lenses, questioning the credibility of journalists and dismissing them as left-leaning. Interviewees openly demonstrated their discontent with the lack of understanding that a warming planet affects everyone and

should be seen as a non-partisan matter, as expressed by this journalist:

> "*People need to understand that this is not an ideological issue, it's a matter of quality of life. If I think about it, I'm more of a centrist, maybe center-liberal or even center-right. And yet, I cover a cause that many people consider left-wing. I'm not left-wing. I just see it as a question of quality of life.*" (Interviewee 1)

Another journalist demonstrated frustation at seeing his outlet unfairly portrayed as aligned with the left-wing government of President Lula:

> "*I really admire Marina Silva, but our role as journalists is not to flatter anyone. It's to do journalism and look critically at what's happening in politics. That's what bothers me: being so easily identified, not necessarily as left-wing, since environmental issues are already strongly associated with the left, but specifically as being aligned with the government. It annoys me, it feels like being seen as a complacent journalist, and I don't like that.*" (Interviewee 12)

Responses about this labelling indicate that journalists believe it has deliberately been turned into a wedge issue, one that undermines trust in journalism and reinforces ideological divides, or "bubbles," as some participants describe them. This photojournalist working mainly in the northern region of Brazil acknowledges that the polarization creates practical barriers to reporting:

> "*I end up moving within a bubble, which is not the far right one, but not by choice. It's very difficult to access that bubble. For example, who can actually interview landowners or those involved in land grabbing? Who can enter their world?*" (Interviewee 10)

Another journalist from the Northern region said that his news outlet is frequently accused of receiving money from the left-wing Worker's Party, "and from Marina Silva," which is a false claim made by conservative groups dissatisfied with the outlet's critical coverage of predatory economic practices. The participant points out that it is challenging to "break through these bubbles" and to reach audiences regardless of their political preferences. The same journalist notes that this polarization fosters a form of denialism that is also cultural, dismissing communities that fight for the protection of the Amazon rainforest.

> "*It's a denial of our own identity, of who we are as a state in the Amazon, as a place historically shaped by its relationship with the forest*". (Interviewee 13).

The themes and insights discussed so far have addressed RQ1 and are interconnected. The next section turns to RQ2 exploring strategies and viewpoints about how to respond to these challenges.

## 3.5 Strategies to navigate the ideological battlefield

Participants reported adopting adaptive tactics to continue their work, though notably they have expressed that there is not a unique formula. The responses reflect on approaches they

personally believe may be effective, besides the fundamental fact-checking steps and based-evidence reporting. The responses include different storytelling formats that can capture audiences attention, accessible language to avoid scientific jargon and diversified distribution channels, among them podcasts and messaging apps.

Most interviewees pointed out that there is no other way than a slow and steady work to inform the public about very complex issues, while sidesteping the polarization. For instance, this reporter makes an effort to highlight the loss of biodiversity, believing that storytelling that centers on non-humans can also foster empathy:

> "*I believe that animals and plants communicate very well. They are empathetic, they tell stories, they bring elements that are not part of people's everyday lives, yet spark their interest and make them feel part of something that belongs to no one, but at the same time to everyone, you know? It's important to show the face of the forest. I like doing that and I always do it based on science. (…) The text can be very light, that's where the fun lies: telling these stories in an extremely accessible way. It's not about humanizing animals, but about turning them into characters. By doing so, you bring people closer, you engage everyone, even the city dweller who wants to feel part of that world. He thinks the story is beautiful, so he'll read it. And through that story, you're talking about drought, about water scarcity, about heat, a range of other issues, in a way that people will actually want to read.*" (Interviewee 1)

Other journalists echoed the relevance of stories centered in the loss of biodiversity as a type of narrative that resonates with audiences beyond partisan politics. Another reporter reinforced the idea that it is necessary to go beyond news stories that merely portray the problems of regions such as the Amazon, and instead focus on solutions, for example, those advocated by Indigenous peoples and communities that were severely attacked during Bolsonaro's administration:

> "*What I've been trying to do is to find a way to change Indigenous coverage so that it's not only about tragedy. So that we don't report just on the hardships, but also on the incredibly rich aspects, not only of Indigenous cosmology, but also of their relationship with the forest itself. That's where things become truly beautiful and fascinating.*" (Interviewee 4)

These approaches appear to emphasize the use of emotions to engage broader audiences while avoiding click baits. One journalist mentioned that he has been using humor to discuss the climate crisis in a way that is not "boring," yet remains grounded in evidence, also steering clear of the activist tone often targeted by the far right. "*The language of humor [in texts and videos] works very well,*" he explained (Interviewee 7).

### 3.5.1 I try very hard not to react with my gut

Most interviewees highlighted the need to avoid an approach that reinforces political confrontation around environmental issues. Though this is not synonym of neutrality, it indicates a willing to rise above the ideological crossfires and divisions. For instance, one journalist described a conscious effort to depoliticize the language, even when covering events that deeply affects her, such as Trump's

and Bolsonaro's anti-science and anti-environmental speeches at the UN General Assembly:

> *"I try very hard not to react with my gut. (…) Every time I used too many [negative] adjectives in a text, every time I wrote with a certain anger that I allowed to spill over, I lost readers. So, it's about not overusing adjectives, about restraint, about controlling emotions. It's about understanding that I do not want to win that argument. I want the person to feel uncertain, to start questioning things after listening to what I'm saying."* (Interviewee 11).

Another journalist stated that news outlets in Brazil took too long to realize that giving voice to high-profile climate deniers amounted to a harmful false equivalence approach. The reporter highlighted the effectiveness of investigative stories in the "follow the money" style to demonstrate the connection between false information on climate change and vested economic and political interests. But in line with other participants, the same journalist emphasized the importance of sharing narratives that bring people together:

> *"One thing that seems clear is that the antidote to disinformation is not information. It's no use thinking, 'I'll just pour some facts into your head, and you'll change your mind.' I'm not entirely sure what the formula is, but I tend to believe it involves empathy, finding some kind of common ground with the audience's life, and, to some extent, a sense of care. When someone tells you something, you first need to listen and acknowledge: 'I understand, I see your point, but look…' We are conditioned to fight disinformation with information, but that's not what changes people's minds."* (Interviewee 5)

Several interviewees pointed out that, given the high consumption of content on social media, it is necessary to find creative ways of telling stories in accessible formats. "We need to venture a little into spaces that are not always comfortable for us, but where we need to be," said one journalist (Interviewee 9), highlighting the importance of having an impactful digital visibility. Similarly, this journalist emphasized that in an extremely polarized area, such as northern Brazil, where illiteracy rates remain high, it is essential to consider the dissemination of accessible audiovisual content. According to the participant, reaching broader audiences quickly is also a strategy to counter disinformation spread by groups linked to far-right politicians in the region:

> *"We need to produce content for forest populations that is adapted to their realities. That is our main concept and our main concern, to speak about the Amazon from the Amazon and for the Amazon. And we need to ask ourselves: how do these populations consume news? How do they communicate? What do they use? Is it through a written text, a one-page article, or a five-page report? Or would sending a three-minute 'Zap cast' [audio message via WhatsApp] have a much greater impact in that territory, in that riverside extractivist community? So, we are deeply concerned with producing content that is adapted to the local reality in order to generate impact here, within the region."* (Interviewee 13)

Overall, the excerpts illustrate how journalists are seeking communication strategies to build trust while reporting on environmental crisis in a fragmented and hostile media landscape.

# 4 Discussion and conclusion

The results highlight the complex interplay between environmental journalism and a hostile political moment in Brazil. The testimonies of those covering stories on environmental issues demonstrate that they must navigate an ecosystem where the information disorder is a symptom of a deeply polarized landscape. The rise of Bolsonarism has intensified the challenges for specialized environmental journalists who face overlapping crises. On the one hand, climate-related stories are gaining more visibility and demand for information on sustainable practices; on the other, the politicization of the topic has directly affected journalistic routines, therefore having an impact on the informational, pedagogical and, mostly, political functions of environmental journalism (Bueno, 2007; Loose and Belmonte, 2023). In that sense, fake news could be considered a "critical incident for the journalistic field," which means an event that pushes journalists to reconsider their practices (Tandoc et al., 2018).

The findings reveal consistency with previous studies that argue that environmental issues are not a neutral field but are instead shaped by competing interests and ideologies (Loose, 2024), which often clash with fact-based and reasoned arguments. Similarly to what Waisbord (2023) argues about science journalism, that it does not operate in a vacuum, neither does environmental journalism and climate reporting. The responses from participants working in both independent and traditional media confirm that the fragmented digital media ecosystem favors polarization and disinformation (Tumber and Waisbord, 2021). Moreover, the topic these journalists cover has itself become weaponized, much like the field of science during Bolsonaro's administration. Social media, as discussed earlier, are ideal vehicles for the rapid spread of unfounded views and pseudoscience, from climate denialism to partisan manipulation of environmental narratives.

The experiences shared by the respondents demonstrate a strong awareness of broader power relations that shape environmental policies and, consequently, environmental news. These findings align with prior research conducted in other Global South contexts (Koirala and Sharma, 2024; Santos and Takahashi, 2025), although the focus here lies on journalists' perceptions on the impact of disinformation. As previously noted, the interview questions did not explicitly refer to Bolsonaro. Nevertheless, participants naturally associated the growing challenges they encounter with the rise of anti-science, anti-media and anti-environment movements encouraged by the far-right leader and his supporters. The fatigue and frustration described by participants, whether from having to explain evidence-based facts about issues such as global warming, or from needing to deny accusations of being aligned with left-wing parties, reveal a form of professional resilience that goes beyond the editorial values of the organizations they work for.

Moreover, competing for attention in contemporary media ecosystem and in the context of post-truth politics has proven to be profoundly problematic (Waisbord, 2023). Further complicating matters is the fact that the difficulties discussed in the interviews unfold in parallel with broader structural challenges affecting media organizations, which continues to experience disruptive transformations driven by digital technologies. The reality of journalism in the Global South differs significantly from that of the Global North, and even in large newsrooms that employ specialized professionals, environmental coverage remains limited due to a series of constraints that extend beyond the scope of this article. As previously

discussed, there is a lack of resources for in-depth reporting that requires costly travel to remote areas often far from the urban centers and particularly vulnerable to social and environmental injustices. Such limitations can also facilitate greenwashing and more injustices (Loose, 2025). Simultaneously, independent media, not tied to large corporations, struggle to find sustainable business models that prevent precarious working conditions in general (Sarmento, 2023; Santos and Takahashi, 2025).

In conclusion, the first four themes that emerged from the data (disinformation as a structural problem; politicization of the environmental beat; the Bolsonaro years as a watershed moment and barriers brought about by polarization) are interconnected and related to RQ1. They provide evidence of a journalistic practice marked by tensions between efforts to inform and engage the public around complex issues, such as climate emergency, and the political instrumentalization of environmental debates, a process exacerbated by the rise of far right in Brazil. Although disinformation is not identified as the primary or an isolated challenge, journalists with long-standing experience in environmental reporting acknowledge that it is a problem that has found a fertile ground on social media and constrains their ability to communicate with wider audiences.

The fifth theme, connected to RQ2, reflect practitioners concern with disseminating stories that combine emotion and empathy, while attempting to transcend political divisions. However, this does not imply support for a neutral approach, but rather an attempt to facilitate connection. In this sense, there are no single formulas that can be prescribed as effective solutions. Nonetheless, the findings suggest that the interviewees advocate for an environmental journalism that seeks to build trust around shared goals, moving in the opposite direction of the populist "us versus them" strategy.

Centered on the views of journalists, this study contributes to the extensive literature on the ongoing consequences of disinformation to media practices. It raises important questions about political hostility and mistrust encountered by professionals covering environmental issues. Among the limitations of this research is the reduced number of interviewees. Therefore, their perspective, although highly specialized in environmental issues, do not represent practices and views across all media organizations in Brazil. Moreover, this research did not aim to empirically map the main types of disinformation related to environmental issues. As environmental communication continues to evolve amid global political instability and technological transformation, future comparative studies are needed to assess, for instance, the impact of new forms of climate denialism.

## Data availability statement

Anonymized data supporting the conclusions of this article will be made available by the authors, without undue reservation.

## Ethics statement

The study received ethical clearance from King's College London's Minimal Risk Research ethics pathway, which does not involve review by a named ethics committee. Ethical clearance was granted through this institutional process under registration confirmation reference MRA-24/25-46497. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent or verbal informed consent to participate in this study following guidance from the Minimal Ethical Risk Guiding Principles of the College Research Ethics Committees (CREC).

## Author contributions

CS: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Writing – original draft, Writing – review & editing.

## Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Generative AI statement

The author(s) declared that Generative AI was used in the creation of this manuscript. The author used ChatGPT (OpenAI, GPT-5) exclusively for language polishing to assist in improving the clarity and fluency of the text. All intellectual work, interpretation, and conclusions are the author's own, and the author assumes full responsibility for the published text.

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## Publisher's note

## Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fcomm.2025.1732001/full#supplementary-material

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