

## Environmental Journalism: from theory to the coverage of the environmental impact of Brazilian salt production

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# Jornalismo Ambiental: da teoria à cobertura sobre o impacto ambiental da produção de sal brasileira

Resumo (PT): O Rio Grande do Norte concentra 95% da produção de sal do Brasil. Essa atividade secular movimenta a economia, a política e a sociedade da denominada região da Costa Branca, no semiárido potiguar. No entanto, estudos de órgãos de defesa do meio ambiente indicam uma série de prejuízos ambientais causados pela manutenção de pilhas de sal em Áreas de Preservação Permanente, o que motivou a atuação do Ministério Público Federal. A cobertura sobre o caso foi objeto de dissertação de mestrado, que analisou, entre outras linhas de pesquisa, a aplicação de princípios do Jornalismo Ambiental nos textos. Apesar da notoriedade de agentes e instituições do campo ambiental nas notícias, percebeu-se que essa predominância não se refletiu em uma maior conscientização e mobilização social, afastando-se da proposta de Jornalismo Ambiental engajado.

*Palavras-chave*: comunicação e meio ambiente, comunicação pública, assessoria de imprensa, Ministério Público Federal, indústria salineira

### Environmental Journalism: from theory to the coverage of the environmental impact of Brazilian salt production

**Abstract** (EN): Rio Grande do Norte concentrates 95% of the salt production in Brazil. This secular activity moves the economy, politics and society of the so-called Costa Branca region, in the semi-arid of the state. However, studies by environmental protection agencies indicate a series of environmental damages caused by the maintenance of salt piles in Permanent Preservation

Areas, which motivated the actions of the Federal Prosecution Office. The coverage of the case was the object of a master's thesis, which analyzed, among other research strands, the application of Environmental Journalism's principles in the texts. Despite the notoriety of agents and institutions from the environmental field in the news items, it can be noted that this predominance was not reflected in a greater awareness and social mobilization, distancing from the proposal of engaged Environmental Journalism.

*Keywords*: communication and the environment, public communication, press office, Federal Prosecutor Office, salt industry

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#### Introduction

This paper analyzes the practical application of theoretical principles of Environmental Journalism in the coverage of Brazilian salt industry environmental issues by digital media outlets in 2019. The analyzed news pieces were produced within a disrupted environmental context in the country, with bigger than usual challenges for environmental advocates, related public service technicians and environmental journalists. It is related to the context of alleged setback and dismantling of Brazilian environmental policies, pointed out by several experts, since the election of President Jair Bolsonaro in late 2018 (Fearnside, 2019; Silva, Ercolani, & Calgaro, 2020; Watanabi, & Takahashi, 2020; Shalders, 2021). While statistics showed that the first two years of this government were marked by accelerated deforestation and increased fires in the Amazon and Pantanal (Shalders, 2021), rules that impact the issues of deregulation, flexibility and privatization increased by 51%, causing legal insecurity and lack of transparency (Watanabi, & Takahashi, 2020).

Regarding the country's salt production, environmental protection institutions and experts (Fernandes, 2019; Ministério Público Federal [MPF], 2019a) indicate that the accumulation of salt piles by industries in environmental protection areas causes a series of damages to the local ecosystem – formed mainly by mangroves and river estuaries. Despite these findings, the President signed a decree that allows industries to continue exploiting the area in the state of Rio Grande do Norte, which concentrates 95% of Brazil's salt production ("Publicado", 2019). The country is the eighth largest producer in the world (Bolen, 2021) with about 7.2 million tons (Mt) produced in 2021 and production value of over US\$ 57 million. In 2017, Brazil exported 946,000 tons, mainly to the United States (45%), Nigeria (38%) and Cameroon (11%), as well as Uruguay and Paraguay (Agência Nacional de Mineração [ANM], 2018).

This secular activity moves the economy, politics, and society of the so-called White Coast area (Image 01), in the semi-arid region of the state, generating approximately 75,000 direct and indirect jobs (Sindicato das Indústrias de Extração do Sal do Estado do Rio Grande do Norte [Siesal] & Sindicato da Indústria de Moagem e Refino do Sal do Estado do Rio Grande do Norte [Simorsal], 2019).

RN State
White Coast Region

Image 1 - Map of the White Coast Region

Source: produced by the authors.

According to specific studies, the historical occupation of river estuaries by the salt production activity has been gradually occupying preservation areas such as mangroves, watercourse margins and even dunes, indicating the socio-environmental compromise of these areas. Possible environmental impacts are the sealing of tidal flatlands, the burial of tidal inlets and tidal arms, the increase in erosive processes, changes in water quality and the decrease in biodiversity. (Grupo Técnico de Trabalho para Regularização dos Empreendimentos Salineiros [GT-Sal], 2017).

Therefore, the Federal Prosecution Office (MPF) in the RN state has acted to prevent the continuance of the environmental losses (GT-Sal, 2017; MPF, 2019a). In turn, salt companies claim to adopt the necessary measures for the preservation of natural resources and seek political support to continue exploiting the area, considered essential for production (Siesal, & Simorsal, 2019). After holding public hearings and attempting to reach agreements with the companies, in January 2019, MPF filed 18 public civil actions that requested that the salt companies present a plan for the gradual relocation of the salt

piles considered irregular (MPF, 2019a). Between June and July, the MPF obtained injunctions ordering the removal (MPF, 2019c).

However, with the edition of Decree 9.824/19 by President Jair Bolsonaro, in June of the same year, the salt industry activity now has the status of social interest, which enables the companies to continue occupying the APPs. As a reaction, MPF filed another lawsuit, asking for the annulment of the decree. Between 2020 and 2021, the processes were forwarded with appeals to upper courts (MPF, 2019d). These facts can be seen in the timeline below.

Image 2 – Timeline of main facts in the dispute between MPF and salt companies in 2019



Source: adapted from MPF (2019a).

The dispute between the companies and MPF, in 2019, originated 90 insertions in blogs, digital portals and news agencies that year. This coverage was analyzed qualiquantitatively in the Master's dissertation conducted by the authors. The research resulted in three analytical streams: (1) the quantification of the space dedicated to the theme, the approaches taken and the profile of the digital vehicles; (2) the analysis of the presence of theoretical principles of Environmental Journalism in the texts and (3) the understanding of which voices were more prominent, according to the social, political and economic context and the related social fields.

The quantitative analysis and relation between the media and the MPF's press office content has been previously discussed by the authors (Melo, & Costa, 2021). Also, a paper regarding the third stream of analysis, which covers the role of the social fields in this media coverage, using the same database, has already been published (Melo, & Costa, 2022). This paper turns to the second line of analysis, focusing on the identification of elements pointed out by several scholars as references for journalistic productions about environmental issues in the news coverage.

Authors like Friedman (2015) and Loose and collaborators (2022) state that greater and better environmental coverage could help people seek solutions to the challenges ahead in a society already marked by chemical health threats, climate change, and limited resources and supplies. Studying Environmental Journalism, therefore, makes it possible to understand how the issue of environmental protection has been portrayed and the appeal of the environmental theme as a matter of public interest.

#### 1. Journalism and the environment

Before analyzing the specific characteristics of the coverage about Brazilian salt production, we see fit to overview the main aspects of the journalistic production on topics related to the environment and sustainability. These remarks are the basis for deepening the understanding of the breadth and limitations of the coverage.

#### 1.1 Concept

Scholars point out the growth in the visibility of environmental protection issues as of the 1960s, mainly in the United States and Europe, and in the 1970s in Brazil (Loureiro, & Pacheco, 1995; Borges, & Tachibana, 2015; Costa, 2006; Buell, 2009; Zupelari, &Wick., 2014; Pott, & Estrela, 2017). With the emergence of the UN and the holding of meetings of world leaders on the topic, the environment became a central issue in social debate, politics, and economics.

Bueno (2007, p. 34, our translation) – a pioneer in the study of the area in Brazil – recalls that Environmental Journalism is part of the concept of Environmental Communication, which encompasses "the set of actions, strategies, products, plans and communication efforts aimed at promoting the dissemination/promotion of the environmental cause". Accordingly, Hansen and Cox (2015, p. 13) consider that Environmental Communication entails "the pragmatic and constitutive modes of expression – the naming, shaping,

orienting, and negociating – of our ecological relationship in the world, including those with nonhuman systems, elements, and species".

Environmental Journalism, more specifically, refers to the work of press professionals, with the characteristics of timeliness and periodicity. Thus, "it is defined both by reports/columns/editorials/booklets on environment published in the mass media (general or specialized information press) and in the vehicles or spaces (of journalistic production) exclusively dedicated to the environment" (Bueno, 2007, p. 34, our translation).

According to the author, the three main purposes of Environmental Journalism are: (1) informative function – to update citizens about the main environmental events; (2) pedagogical function – explanation of the causes and possible solutions for the issues; (3) political function – mobilization of citizens and surveillance of the actions of rulers and public policies (Bueno, 2007; Loose, Lengert, & Cervo, 2022).

Girardi and collaborators (2018) defend the engagement and investigative spirit as guiding factors of Environmental Journalism, which should: present a systemic overview of environmental events; not be limited to official sources, with diversity of information; defend the logic of sustainability; and have an educational intent. Schwaab (2018) reinforces this view, stating that Environmental Journalism can be considered militant to the extent that it defends the socio-environmental logic, dealing with common good, citizenship, and justice. This aspect is also emphasized by Bueno (2007), for whom Environmental Journalism must have an engaged position in order to oppose pressures from governments, companies, and even universities and research institutes that are hostages of their interests.

To this end, journalists need to know the political, economic, and social issues that involve the environmental theme, enabling an in-depth and multidimensional journalistic practice (Miguel, & Machado, 2019; Loose et al., 2022; Gilbert, White, & Tallman, 2022). Thus, sociopolitical engagement provides a holistic view, capable of addressing environmental agendas in their multiple causes and dimensions, showing the public how the relationship with the environment impacts different aspects of social life (De Holanda, 2017; Schwaab, 2018; Miguel, & Machado, 2019; Loose et al., 2022).

From this overview of the concept of Environmental Journalism, we address some of the challenges in the journalistic market and routine that, in many cases, set apart the theoretical precepts from the practice of socio-environmental media coverages.

#### 1.2 Challenges

The branch of Environmental Journalism, although developing, is not yet consolidated in the world press, and even less so in the Brazilian press (De Holanda, 2017; Girardi, De Moraes, Loose, & Belmonte, 2018; Bueno, 2013). For Girardi and collaborators (2018), the way journalism increasingly addresses environmental issues reflects the development of ecological awareness in Brazil and worldwide.

Hansen and Cox (2015) point out that society's familiarity with the concept of environment and environmental discourse is largely due to the media, which has brought environmental issues to the center of public and political attention. Hansen (2019, p. 21) argues that "the ways in which we, as individuals, citizens, cultures and societies experience, view, perceive and value nature and the natural environment" are shaped by media communication.

Many media outlets approach environmental issues from the point of view of other areas, due to not having specific environmental editorials (Trigueiro, 2005; De Holanda, 2017; Gern, & Lima, 2018; Mourão, & Sturm, 2018). This view is corroborated by Bueno (2013), when he states that Brazilian environmental journalistic coverage – despite being quantitatively significant – tends to treat environmental themes under a single focus (scientific, economic, or political), which leads to limited approaches.

Gern and Lima (2018, p. 29, our translation) reinforce that "current Journalism still presents, with commendable exceptions, the environmental issue in a restricted, fragmented, poorly contextualized way and marked by economic biases". The authors point out the lack of a holistic view on environmental problems, from their interdisciplinary relationship with social, political, economic, and historical aspects.

Schwaab (2018) also identifies this simplification of the theme in the press in a cosmetic and decontextualized way, addressing punctual actions, while macro social and political issues are left aside. For Miguel and Machado (2019, p. 286, our translation), "the reductionist view compresses the breadth of the environmental issue and impoverishes discussions that encompass the social, economic, political, and cultural spheres." According to De Holanda (2017), this lack of depth deprives society of a more active environmental awareness, making room for harmful practices.

Reiterating these trends, authors such as Hansen (2019) and Friedman (2015) highlight that the decontextualization and fragmentation of environmental agendas are accentuated by the cyclical nature of coverage. According to them, media interest in the environment alternately intensifies and diminishes over the decades, depending on the climatic,

political, and socioeconomic context. This lack of constancy leads to an imbalance between the portrayal of journalism and the actual global demands (Trigueiro, 2005; Friedman, 2015; Hansen, 2019; De Holanda, Kääpa, & Costa, 2022).

In this perspective, Miguel (2012, pp. 128-129, our translation) considers that, instead of a holistic view, environmental agendas end up reproducing "positivist, anthropocentric, and sometimes sensationalist ideals." Bueno (2007) also highlights the decontextualization of environmental issues through the segregation between technical aspects and economic, political, and sociocultural implications. As a result, journalism gives priority, or even exclusivity, to sources from the specialized scientific field – which may be linked to the interests of specific economic or political groups – excluding citizens and the multifactorial analysis (Bueno, 2007; Gilbert et al., 2022).

Still on the sources journalists turn to, Williams (2015, p. 203) warns that "the decline of journalism in general, and environment journalism in particular, is leading to elements of journalism practice being outsourced to powerful and efficient news sources with slick and well-resourced public relations teams".

From the standpoint of journalistic production on a global level, De Holanda and collaborators (2022) and Gilbert et al. (2022) call attention to the fact that specialized reporting demands more time and infrastructure, which creates a financial barrier to indepth environmental productions. Thus, the influence of financial issues still limits the production of environmental news (De Holanda et al., 2022; Gilbert et al., 2022).

Takahashi and collaborators (2018) recall that countries in Latin America and the Caribbean have a different context. With ecosystems important for the ecological balance of the entire planet, these multicultural countries face constant political instability and difficulties to enforce environmental legislation, which makes the role of an engaged and productive Environmental Journalism even more relevant. However, the region still presents economic, political, and social barriers that limit the space and prominence of environmental issues and prevent the consolidation of this journalistic field (Mourão, & Sturm, 2018; Takahashi et al., 2018).

Looking at the current challenges, Friedman (2015) highlights those changes in the journalism business model and media convergence, with the new reality of digital journalism, bring new demands for environmental coverage. According to the author, in the United States, budget and staff cuts in newsrooms had a great impact on the environmental area, with the extinction of teams – such as those of CNN, NBC, and the

New York Times – and specific vehicles. This is also the reality of Brazilian journalism (Maciel, 2006; Sampaio, 2014).

Studies by Macnamara (2009), Maciel (2006), Sampaio (2014) and Gilbert and collaborators (2022) indicate that the dynamics of digital journalism imposes a frenetic rhythm of production in which speed overrides news content. On the other hand, the consolidation of the Internet has brought benefits, such as the emergence of several blogs on the environment and new possibilities for the production of multimedia and interactive content (Friedman, 2015). Miguel and Machado (2019) ratify this view by analyzing approaches to environmental issues with the use of new technologies. It was observed that the use of digital resources – such as transmedia narratives<sup>1</sup>, virtual reality<sup>2</sup> and gamification<sup>3</sup> – propitiate the creation of interactive and immersive journalistic products, with more in-depth and multidimensional socioenvironmental coverage (Miguel, & Machado, 2019).

The mentioned authors demonstrate that the way communication vehicles report socioenvironmental issues influence the knowledge and attitudes of society. The following analysis allows us to observe how the news about the environmental issues of the Brazilian salt production put into practice, or not, the already commented theoretical aspects of Environmental Journalism, and how these characteristics influenced the content that reached the readers.

#### 2. Methodology

This research is based on the Master's research that employed, mainly, the Content Analysis (CA) methodology, defined as "a set of techniques for analysis of communications, which uses systematic and objective procedures to describe the content of messages (...)" (Bardin, 2011, p. 30, our translation). The search for objectivity serves the intention of the methodology: "the inference of knowledge concerning the conditions of production (or, eventually, reception), an inference that resorts to indicators

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<sup>&</sup>lt;sup>1</sup> Miguel and Machado (2019) explain that the concept of transmedia is still debated by several scholars. They consider the approach that identifies transmedia journalism by the simultaneous use of elements that complement each other in different media.

<sup>&</sup>lt;sup>2</sup> Kirner and Siscouto (2007, p. 4, as quoted by Miguel, & Machado, 2019, p. 295, our translation) define virtual reality as "a new generation of interface, insofar as, by using three-dimensional representations closer to the user's reality, it allows breaking the barrier of the screen, as well as enabling more natural interactions."

<sup>&</sup>lt;sup>3</sup> Strategy of creating video game based on real-life situations that provides information and involves the user in a theme, generating engagement, socialization, and motivation through challenge and entertainment (Tolomei, 2017; Miguel, & Machado, 2019).

(quantitative or not)" (Bardin, 2011, p. 38, our translation). CA seeks, therefore, to reach the meaning of the text, behind the words (Rocha, & Deusdará, 2005). As previously stated by the authors (Melo, & Costa, 2022, p. 94), "Franco (2021) argues that CA enables a study with a critical approach that recognizes the active role of subjects in the production of knowledge, without losing quality and systematization in data analysis". Franco (2021) highlights that messages are linked to the context of their production:

Contextual conditions involving the historical evolution of humanity; the economic and sociocultural situations in which the senders are inserted, access to linguistic codes, the degree of competence to know how to decode them which results in verbal expressions (or messages) loaded with cognitive, subjective, affective, evaluative and historically changeable components (Franco, 2021, p. 3, our translation).

Her conception corroborates the view adopted in this research, which understands the journalistic practice as a social construction (Vizeu, 2005). In view of the above, the following methodological steps were taken to analyze the news coverage on the MPF/RN's action regarding the salt industry in APP areas, as proposed by Bardin (2011).

- 1. Pre-analysis: documents' selection; floating reading, as the first contact with the texts; review or formulation of the objectives and hypothesis; development of categories and indicators; preparation of the material.
  - 2. Material exploration: data analysis and categorization.
- 3. Treatment and interpretation: compilation of the data and formation of inferences for analysis.

In the Master's research that originates this paper, the initial *corpus* of analysis was composed of the coverage of portals, blogs, and news agencies about the occupation of permanent preservation areas (APPs) by Potiguar salt pans in 2019, formed by 90 publications. The gathering was carried out from the clipping reports of the MPF/RN and complemented with the Google news search tool, with the keywords "MPF/RN salinas APP", "MPF sal RN", "salineiras RN MPF" and "salt industry Rio Grande do Norte APP" (Melo, & Costa, 2021).

For the analysis facet explored in this paper, the influence and presence of theoretical elements that define Environmental Journalism in the news produced by portals, blogs and agencies were verified. To do so, we applied CA, with Categorical Analysis<sup>4</sup>, using the main characteristics of Environmental Journalism as indicators for categorizing the texts, extracted from the study of the main authors in the area (Trigueiro, 2005; Bueno, 2007; Friedman, 2015; De Holanda, 2017; Girardi et al., 2018; Schwaab, 2018; Hansen, 2019; De Holanda et al., 2022; Loose et al., 2022). In addition, the Contingency Analysis<sup>5</sup> technique (Bardin, 2011; Gonçalves, 2016) was used to understand the relationships among the criteria.

The purpose of this analysis is to identify the journalistic discourse made available to the readers in digital news outlets and how they reflect (or not) the principles of Environmental Journalism. Although portals<sup>6</sup>, blogs<sup>7</sup>, and news agencies<sup>8</sup> have different objectives and formats, which are taken into consideration in the analysis, they all compose the digitally available information about the topic.

#### 3. Analysis: aspects of Environmental Journalism in the coverage

Before focusing on the detailed analysis of the theoretical precepts of Environmental Journalism, it is relevant to provide a brief context of the analyzed coverage, the involved news outlets, their relation to the MPF's press releases and the identified journalistic sources.

#### 3.1 The coverage

Local and national digital vehicles followed the political and judicial dispute between MPF/RN and the salt industry through 90 news items published throughout 2019 by 54 blogs, portals and news agencies. The previous analysis of the quantitative data of the

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<sup>&</sup>lt;sup>4</sup> "dividing the text into units, into categories according to analogical groupings" (Gonçalves, 2016, p. 282, our translation). It is the most used generalist technique in CA, including as a basis for the others, by grouping and quantifying text elements according to the defined indicators (Bardin, 2011).

<sup>&</sup>lt;sup>5</sup> "considers that the most important thing is not the number of times certain words, themes or types of characters appear in a message, but how they are organized among themselves, that is, what is associated with what" (Gonçalves, 2016, p. 283, our translation). Thus, according to Bardin (2011), one must observe the co-occurrences of elements in the texts to understand the relationship between them, whether of association or dissociation. With this, one can understand more about the social representations, stereotypes and ideologies that influence the writer.

<sup>&</sup>lt;sup>6</sup> Defined as online news referral websites that offer press-like editorial content, including sports and traffic bulletins, as well as sections and links categorized by topic, areas for chat, email, tips, and a variety of services and products (Herscovitz, 2009, p, 3).

<sup>&</sup>lt;sup>7</sup> Blogs are "virtual publications containing comments about other websites, updated regularly and organized chronologically (...) consisting of updated and brief information, organized in date order, like a news page or a diary" (Rabaça, & Barbosa, 2014, p. 3, our translation).

<sup>&</sup>lt;sup>8</sup> News agencies play "a key role as a primary resource of news material" by producing content directly from the originating sources for media outlets to use at different opportunities (Obercom, 2016, p. 3, our translation).

coverage showed that the majority of these vehicles were blogs (30) and portals (21), in addition to three agencies (Melo, & Costa, 2021). The newsrooms located in RN are 85% of the total, which demonstrates the predominantly regional character of the coverage. Media from other Brazilian states – São Paulo (4), Amazonas, Ceará (1) and Pernambuco (1) – have also covered the theme, to a lesser extent. Among the news from the RN state, the most important ones were from the capital Natal (43%) and from Mossoró (20%), which is the largest city in the White Coast region and the second largest in the state (Melo, & Costa, 2021).

This analysis allowed us to observe that, in most of the news, the journalists had a passive and dependent posture on the institutional content of MPF/RN, which produced five releases on the theme in 2019, as shown in the table below.

Table 1 – Press releases from MPF/RN about the salt industry in 2019

Date	Heading (our translation)	Related fact
01/29/19	MPF wants salt companies removed from preservation areas and to relocate salt production (MPF, 2019a) <sup>9</sup>	MPF filed 18 public civil actions against salt companies
06/04/19	MPF obtains injunction for company to gradually stop using salt piles located in preservation area (MPF, 2019b) <sup>10</sup>	– Legal decisions in favor of the MPF
06/11/19	MPF obtains injunction for one more company to deactivate salt piles in preservation area (MPF, 2019c) <sup>11</sup>	
08/07/19	MPF wants to annul decree allowing salt companies to operate in preservation areas (MPF, 2019d) <sup>12</sup>	Filing of a lawsuit for the annulment of  the presidential decree that made the salt production of social interest
08/09/19	MPF wants to prevent environmental licensing for salt companies in preservation areas (MPF, 2019e) <sup>13</sup>	

Source: produced by the authors.

<sup>&</sup>lt;sup>9</sup>http://www.mpf.mp.br/rn/sala-de-imprensa/noticias-rn/mpf-quer-retirada-de-salinas-de-areas-de-preservacao-e-realocacao-da-producao-do-sal

<sup>&</sup>lt;sup>10</sup>http://www.mpf.mp.br/rn/sala-de-imprensa/noticias-rn/mpf-obtem-liminar-para-que-empresa-pare-gradativamente-de-utilizar-pilhas-de-sal-localizadas-em-area-de-preservacao

<sup>&</sup>lt;sup>11</sup>http://www.mpf.mp.br/rn/sala-de-imprensa/noticias-rn/mpf-obtem-liminar-para-mais-uma-empresa-desativar-pilhas-de-sal-em-area-de-preservacao

<sup>&</sup>lt;sup>12</sup>http://www.mpf.mp.br/rn/sala-de-imprensa/noticias-rn/mpf-quer-anular-decreto-que-permite-funcionamento-de-salinas-em-areas-de-preservacao

<sup>&</sup>lt;sup>13</sup>http://www.mpf.mp.br/rn/sala-de-imprensa/noticias-rn/mpf-quer-impedir-licenca-ambiental-para-salinas-em-areas-de-preservacao

It was identified that 80% of the texts relate to the releases, with equal or very close publication dates. As a result, not only were 73% of the news stories were favorable to MPF/RN, but also almost half of them (44, or 48.8%) were exact copies of the releases. It is also noteworthy that 42 of the 44 reproductions were made by vehicles from the RN state (Melo, & Costa, 2021).

Image 3 – Examples of the resemblance between MPF/RN's press releases and the content published by digital media

Above, the MPF's press release headline reads: "MPF wants salt companies removed from preservation areas and to relocate salt production" (our translation). Similarly, in the bottom left, Carol Ribeiro Blog states "MPF wants salt companies removed from environmental preservation areas" (our translation); in the bottom right, Tribuna do Norte's story says "MPF wants salt companies removed from preservation areas and to relocate salt production". The lead statement is the same in the three texts: "The Federal Prosecution Office (MPF) filed public civil actions against 18 salt companies from Rio Grande do Norte" (our translation).

#### MPF quer retirada de salinas de áreas de preservação e realocação da produção do sal









Ações judiciais foram a única alternativa que restou após duas audiências públicas e tentativas frustradas de firmar acordos com os empresários



Escoamento de sal de uma pilha localizada em APP

O Ministério Público Federal (MPF) ingressou com ações civis públicas contra 18 empresas salineiras do Rio Grande do Norte. Elas mantêm ilegalmente - atividades em áreas de preservação permanente (APPs), protegidas por lei e cujo uso não pode ser regularizado. Um prazo de quatro anos, podendo ser prorrogado por igual período, é sugerido para que os proprietários possam concluir a

remoção sem que os empreendimentos percam sua viabilidade econômica. As áreas irregulares representam apenas 10% do espaço ocupado pelas salinas.



Sources: MPF, 2019a; "MPF quer", 2019a; "MPF quer", 2019b.

In a different strand of analysis, it was examined which agents and institutions were more mentioned and used as sources for the news. To do so, the concept of social fields<sup>14</sup>, by Pierre Bourdieu (1998), was used to understand how the interaction between the different

<sup>&</sup>lt;sup>14</sup> Fields are autonomous microcosms in the social world, with specific values, objects, and interests (Bourdieu, 1998; Thiry-Cherques, 2006; Costa, 2006).

social segments involved in the theme impacted the informative discourse of the digital vehicles (Melo, & Costa, 2022).

It was clear that the expressiveness of the quantitative data in relation to MPF/RN directly reflected the content of the journalistic texts: the institution was the most mentioned agent in the coverage (in 85 news stories), with the highest number of positive mentions (64 news stories) and the main source for the editorial staff of portals and blogs (in 70 occasions). The intersection between the environmental, scientific and juridical fields prevailed, in the coverage analyzed, over the discourse coming from the economic field (which was supported by the political field) (Melo, & Costa, 2022).

With 317 mentions, the environmental field was the main origin of the sources, on 173 occasions; the juridical field had 226 mentions and served as a source in 141 passages; the scientific field was mentioned 151 times, and its agents/institutions were sources in 44 cases. The economic and political fields, despite being mentioned a lot (495 and 149 mentions, respectively), were not very expressive as news sources (23 and 24 times, respectively) (Melo, & Costa, 2022).

#### 3.2 The application of the principles of Environmental Journalism

From the conceptualization and characteristics of the practice of Environmental Journalism supported by several researchers (Trigueiro, 2005; Bueno, 2007; Friedman, 2015; De Holanda, 2017; Girardi et al., 2018; Schwaab, 2018; Hansen, 2019; De Holanda et al., 2022; Loose et al., 2022), we now seek to identify the presence of defining elements of this journalistic branch in the coverage under analysis. To this end, the following criteria were selected, according to the authors indicated:

- 1. Educational purpose: the text assumes the pedagogical function of explaining the causes and possible solutions to environmental issues (Bueno, 2007; Girardi et al., 2018; Loose at al., 2022);
- 2. Holistic view: the text considers the complex context surrounding the environmental issue, addressing the economic, political, social, cultural, and ethical factors and their relationships (Trigueiro, 2005; Girardi et al., 2018; Schwaab, 2018; De Holanda et al., 2022);
- 3. Engagement: the text stops being impartial by taking a stand in defense of socioenvironmental logic, stimulating qualified debate and transformative social mobilization

(Trigueiro, 2005; Bueno, 2007; Friedman, 2015; Girardi et al., 2018; Schwaab, 2018; Loose et al., 2022);

4. Deepening: the text can be considered a full reportage by going deeper into the reporting of the facts and their implications and not being limited to official sources or fragmented views (Trigueiro, 2005; Friedman, 2015; De Holanda, 2017; Girardi et al., 2018; Schwaab, 2018; Hansen, 2019).

It is worth mentioning that the concept of Environmental Journalism is neither rigid nor arbitrary, involving continuous discussions among scholars. Thus, the identification of criteria in the texts is indicative of a greater approximation with the theoretical assumptions, but does not aim to classify them exhaustively.

As the analysis emphasizes the composition of the journalistic text, considering the writing technique, it is not possible to include the insertions that were not actually produced by the vehicles. Thus, for this cut, we have a corpus of 46 news items.

The complete assessment of these aspects in the 46 reports showed that 33 of them (71.7%) did not present any of the four characteristics related to Environmental Journalism. The educational character was the most identified principle, in 12 news items (26%); the holistic vision is present in nine texts (19.5%); engagement, in eight (17.3%); deepening, in seven (15.2%).

The low presence of these characteristics can be explained, in many cases, by the purpose of the texts and the nature of the vehicles. Thus, many of the news articles have the objective of informing a specific development of the case – like the signature of the presidential decree, or the concession of an injunction against a salt company –, without the intention of deepening the environmental issues and their implications. In other words, many of the texts are not productions of Environmental Journalism and had no such intention.

In fact, only three news items were published in a specific vehicle or editorship on environment: in the case of the vehicles focused on the environmental theme O Eco (Lisboa, 2019)<sup>15</sup> and Agência Eco Nordeste (Crispim, 2019)<sup>16</sup> and, also, in the story of Folha de S. Paulo (Valente, 2019)<sup>17</sup>, published in an environmental editorship.

 $<sup>\</sup>frac{\text{https://www.oeco.org.br/noticias/bolsonaro-autoriza-exploracao-salineira-em-app-no-rio-grande-do-norte}$ 

http://agenciaeconordeste.com.br/salinas-do-rio-grande-do-norte-estao-no-centro-de-uma-grande-polemica/

https://www1.folha.uol.com.br/ambiente/2019/08/decreto-de-bolsonaro-que-poupa-industrias-de-sal-e-ilegal-diz-procuradoria.shtml

Another factor for the distance between news and the criteria of Environmental Journalism is the dynamics of digital journalism, which imposes speed in news shooting and short texts – as demonstrated by authors such as Sampaio (2014), Macnamara (2009) and Maciel (2006) - narrowing the possibilities of deepening and adoption of holistic view by the newsrooms.

Even considering these factors, it is noticeable that the frequent limitations in coverages of environmental issues, pointed out in some studies and exemplified below, were present, such as: prominence of political or economic aspects in detriment of environmental ones; fragmented view and disregard of the social, economic, political and cultural context involved; limitation of sources; neutrality and lack of engagement (Trigueiro, 2005; Bueno, 2007; Friedman, 2015; De Holanda, 2017; Gern, & Lima, 2018; Mourão, & Sturm, 2018; De Holanda et al., 2022).

Texts such as those of the blogs Thaisa Galvão ("MPF quer", 2019c)<sup>18</sup>, Carol Ribeiro ("MPF quer", 2019a)<sup>19</sup> and Saulo Vale ("MPF quer", 2019d)<sup>20</sup>, when reporting the public civil actions by MPF/RN against the salt companies in early 2019, although they have not reproduced the releases, they only adapted them, without resorting to other sources, demonstrating the lack of depth, holistic vision and engagement required by Environmental Journalism. In fact, among the excerpts suppressed, these vehicles chose to cut precisely the parts that explained the possible environmental impacts of the salt production activity, such as the following excerpt from the first institutional release:

Irregular occupation results in several damages to the ecosystem, including the sealing of tidal plains; the burial of gamboas and tidal arms; the increase of erosive processes; the alteration of water quality; and the decrease of biodiversity. These factors are directly reflected in the quality of life and economic activities of current and future generations that inhabit the region (MPF, 2019a, online, our translation).<sup>21</sup>

 $<sup>\</sup>frac{18}{salinas-no-rn/} \underline{https://www.thaisagalvao.com.br/2019/01/29/mpf-quer-desocupacao-de-10-de-areas-ocupadas-por-18-salinas-no-rn/}$ 

<sup>&</sup>lt;sup>19</sup> https://www.blogcarolribeiro.com.br/2019/01/mpf-quer-retirada-de-salinas-de-areas.html

https://saulovale.com.br/mpf-quer-retirada-de-salinas-de-areas-de-preservacao-e-realocacao-da-producao-do-sal/?\_rota=mpf-quer-retirada-de-salinas-de-areas-de-preservacao-e-realocacao-da-producao-do-sal

http://www.mpf.mp.br/rn/sala-de-imprensa/noticias-rn/mpf-quer-retirada-de-salinas-de-areas-de-preservacao-e-realocacao-da-producao-do-sal

News opposed to MPF/RN distanced themselves even further from the theoretical precepts, by dissociating socioeconomic issues from environmental matters, which were left in the background, or even ignored, as can be seen in the following excerpts:

After the Federal Prosecution Office (MPF) filed, last Tuesday, 29, against 18 salt companies in RN for activities in permanent preservation areas (APPs), panic was established in the sector that employs 70 thousand workers, directly and indirectly and operated R\$ 1 billion last year, with the collection of R\$ 150 million in taxes (Hollanda, 2019, online, our translation).<sup>22</sup>

During the meeting, entrepreneurs of the sector exposed the importance of the salt industry activity, highlighting mainly the generation of employment and income and the difficulties in achieving compliance with other recommendations determined by the Federal Prosecution Office ("Indústria", 2019, online, our translation).<sup>23</sup>

Six news items had at least two of the characteristics of Environmental Journalism identified with emphasis on the educational aspect, present in all six, like in two texts from G1 RN, about the preliminary injunction decision favorable to the removal of a salt pile from a protected area and the request for annulment of the presidential decree:

According to GT Sal, "it is highly likely that a torrential rain, which is common in the rainy season in the semi-arid, could destabilize a pile of salt with millions of tons and cause a large volume of salt to be carried into the estuary increasing the salinity and thus not allowing the species that benefit from this water input" ("TRF5", 2019, online, our translation).<sup>24</sup>

For the MPF, the changes could lead to the alteration of the places of refuge of crustaceans, fish and birds, "thus compromising communities of shellfish gatherers, fishermen and crab pickers" and resulting in the silting up of the channels ("MPF", 2019e, online, our translation).<sup>25</sup>

<sup>22</sup> https://agorarn.com.br/economia/empresarios-querem-decreto-para-tornar-o-sal-de-interesse-social-no-rn/

<sup>&</sup>lt;sup>23</sup> http://blogcarlossantos.com.br/industria-salineira-quer-apoio-para-se-manter-viva/

https://g1.globo.com/rn/rio-grande-do-norte/noticia/2019/06/04/trf5-determina-que-empresa-reloque-producao-de-sal-localizada-em-area-de-preservacao-no-rn.ghtml

https://g1.globo.com/rn/rio-grande-do-norte/noticia/2019/08/07/mpf-pede-anulacao-de-decreto-presidencial-que-permite-salinas-em-areas-de-preservacao-ambiental-no-rn.ghtml

Two reports, from Folha de S. Paulo (Valente, 2019)<sup>26</sup> and Agência Eco Nordeste (Crispim, 2019)<sup>27</sup>, in turn, stood out for presenting the four listed criteria, and can be considered, in fact, productions compatible with the assumptions of Environmental Journalism. The Folha de S. Paulo text was reproduced by three other associated vehicles. The following table shows the presence of these characteristics in the two news articles.

Table 2 – Characteristics of Environmental Journalism in the news items from Folha de S.Paulo and Agência Eco Nordeste

	"Bolsonaro's decree saving salt industries is illegal, says Prosecution Office" - Folha de S. Paulo (08/07/2019)	"Salt industries in the Rio Grande do Norte state are at the center of a major controversy" - Agência Eco Nordeste (12/30/2019)
Educational purpose	"The continuity of the activity in the APPs, according to MPF, can lead to numerous environmental damages, among which 'impermeabilization of tidal plains; burial of gamboas [river and sea backwaters] and tidal arms ()"	"Sustainable Development seeks the compatibility between the legal purposes admitted to the economic sector and the necessary environmental protection for present and future generations."
Holistic view	"RN salt producers are responsible for about 95% of the salt production in Brazil, with almost 6 million tons per year. According to the entrepreneurs' union, they generate 60,000 direct and indirect jobs in the region."	"Taygra recalls that these salt productions gave rise to towns in the region and reminds that there are entire towns that subsist on salt activities or that salt activities are the main activity."
Engagement	A graphic scheme highlighted the of MPF's actions in defense of the environment, with excerpts such as: "MPF promotes hearings and attempts to reach agreement with businessmen".	Highlighted in the intertitle: "The activity is traditional and moves the economy of several cities in the Northern RN coast. But, like any human activity, it has its impacts on the natural environment and that is exactly what this report is about, produced throughout this second half of 2019."
Deepening	"Ibama issued 116 infraction notices, of which 19 for irregular occupation of APPs, 52 for problems in environmental technical registrations, 34 for absence of an environmental license, four for pollution, and four for other infractions."	"Planned in 2010, Operation White Gold went down in history as one of the most successful actions among the RN environmental agencies, involving 21 federal agents from five states (RN CE, AL, PE, ES), in addition to the participation of the Environmental

https://www1.folha.uol.com.br/ambiente/2019/08/decreto-de-bolsonaro-que-poupa-industrias-de-sal-e-ilegal-diz-procuradoria.shtml

http://agenciaeconordeste.com.br/salinas-do-rio-grande-do-norte-estao-no-centro-de-uma-grande-polemica/

Protection Directorate (Dipro), from Brasilia."

Source: produced by the authors.

Despite being a portal specialized in environment, O Eco (Lisboa, 2019)<sup>28</sup> produced a piece of news without the engagement that is fundamental to Environmental Journalism. The text presents balanced arguments between those who defend and those who are against the occupation of protection areas by salt production plants.

#### **Conclusion**

In the analysis of the presence of Environmental Journalism principles in the news about environmental issues of the salt production in the state of Rio Grande do Norte, it was observed that more than 70% of the original texts did not present any of the elements listed as characteristic of this journalistic branch – educational character, holistic view, engagement and deepening.

Possible explanations for this low presence are the already mentioned routine of digital journalism; the purpose of the texts and vehicles and the limitation of time and resources for more comprehensive investigations, factors pointed out in several previous studies (Trigueiro, 2005; Bueno, 2007; Friedman, 2015; De Holanda, 2017; Girardi et al., 2018; Schwaab, 2018; Hansen, 2019; De Holanda et al., 2022; Loose et al., 2022).

Hence, much of the news had a fragmented and superficial view of environmental issues, their causes and possible consequences and solutions. In addition, there are news stories, especially those contrary to MPF/RN, in which priority was given to the economic and political aspects of the dispute with the salt industry.

While six news reports presented more than one of the characteristics of Environmental Journalism – with emphasis on the educational character, present in 26% of the original texts of the coverage –, only two reports can be considered as fully representative of the branch, by assuming the defense of the environment in an engaged approach, with deepening in the portrayal of the theme, and consideration of the political and

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<sup>28</sup> https://www.oeco.org.br/noticias/bolsonaro-autoriza-exploracao-salineira-em-app-no-rio-grande-do-norte/

socioeconomic context in a connected way to the environmental one. These two news stories also listened to different related sources, which did not occur in most of the coverage, as demonstrated in the expansion of the analysis criteria from Pierre Bourdieu's sociology.

Thus, despite the visibility of institutional agents of the environmental field, indicated in the analysis of the social fields involved in the coverage, it can be seen that this predominance, in much of the news, was not reflected in a greater awareness and social mobilization about the environmental impact of the salt production.

As already mentioned, the way media address environmental issues has the potential to influence the perception and mobilization of society (Trigueiro, 2005; Girardi et al., 2018). Thus – even though they are non-specialized vehicles and do not aim to produce in-depth reports – when dealing with the socio-environmental impacts of the salt industry, the news could have come closer to the principles of Environmental Journalism, to contribute to further dissemination of information and social engagement.

#### REFERENCES

Agência Nacional de Mineração. (2018). *Sumário mineral brasileiro*. Departamento Nacional de Produção Mineral.

Bardin, L. (2011). Análise de conteúdo. Edições 70.

Bolen, W. P. (2021). Salt. In *Mineral Commodity Summaries 2021* (pp. 138-139). United States Geological Survey. <a href="https://pubs.usgs.gov/periodicals/mcs2021/mcs2021.pdf">https://pubs.usgs.gov/periodicals/mcs2021/mcs2021.pdf</a>

Borges, F. H., & Tachibana, W. K. (2015). A evolução da preocupação ambiental e seus reflexos no ambiente dos negócios: uma abordagem histórica. *Proceedings of the 25th Encontro Nacional de Engenharia da Produção*, Porto Alegre, 25, 5235-5242. http://www.abepro.org.br/biblioteca/enegep2005 enegep1005 1433.pdf.

Bourdieu, P. (1998). O poder simbólico. Bertrand Brasil.

Buell, L. (2009). The future of environmental criticism: environmental crisis and literary imagination. John Wiley & Sons.

Bueno, W. C. (2007). Jornalismo ambiental: explorando além do conceito. *Desenvolvimento e Meio Ambiente*, 15, 33-44. https://revistas.ufpr.br/made/article/view/11897.

Bueno, W. C. (2013). Assessoria de imprensa e complexidade: superando os equívocos da teoria e da prática tradicionais. *Proceedings of the Encontro Anual da Compós*, Salvador, 22, 1-17.

Costa, L. M. (2006). Comunicação e Meio Ambiente: a análise das campanhas de prevenção a incêndios florestais na Amazônia. UFPA; NAEA.

Crispim, M. (2019, December 30). Salinas do Rio Grande do Norte estão no Centro de uma grande polêmica. *Agência Eco Nordeste*. <a href="https://agenciaeconordeste.com.br/salinas-do-rio-grande-do-norte-estao-no-centro-de-uma-grande-polemica/">https://agenciaeconordeste.com.br/salinas-do-rio-grande-do-norte-estao-no-centro-de-uma-grande-polemica/</a>.

De Holanda, J. S. P. (2017). *Ventos do desenvolvimento: o início da cobertura sobre energia eólica no jornal Tribuna do Norte* [Masters Dissertation]. Universidade Federal do Rio Grande do Norte. <a href="https://repositorio.ufrn.br/handle/123456789/23600">https://repositorio.ufrn.br/handle/123456789/23600</a>.

De Holanda, J. S. P., Kääpä, P., & Costa, L. M. (2022). Jornalismo ambiental: características e interfaces de um campo em construção. *Intercom, Rev. Bras. Ciênc. Comun.*, 45. https://doi.org/10.1590/1809-58442022109pt.

Fearnside, P. M. (2019). Retrocessos sob o Presidente Bolsonaro: Um desafio à sustentabilidade na Amazônia. *Sustentabilidade International Science Journal*, 1(1). <a href="http://inct-servamb.inpa.gov.br/publ\_livres/2019/Fearnside-Retrocessos\_sob\_operation.">http://inct-servamb.inpa.gov.br/publ\_livres/2019/Fearnside-Retrocessos\_sob\_operation.</a> Presidente Bolsonaro-Revista Sustentabilidade.pdf.

Fernandes, R. T. V. (2019). Atividade salineira em manguezais do semiárido: impactos ambientais e reflexos econômicos da recuperação ou compensação ambiental das áreas degradadas [Doctoral Dissertation] Universidade Federal Rural do Semi-Árido.

Franco, M. L. P. B. (2021). Análise de Conteúdo. Autores Associados.

Friedman, S. M. (2015). The changing face of environmental journalism in the United States. In A. Hansen, & R. Cox (Eds.), *The Routledge handbook of environment and communication*, (pp. 144-157). Routledge.

Gern, A., & De Lima, M. D. V. (2018). Aprender e ensinar o jornalismo ambiental. In I. M. T. Girardi, C. H. De Moraes, E. B. Loose, & R. V. Bellmonte. (2018). *Jornalismo ambiental: teoria e prática*. Metamorfose.

Gilbert, S., White, P. B., & Tallman, K. (2022). Information seeking behaviors of environmental journalists. *Journal of Librarianship and Information Science*, *54*(3), 427-440. https://doi.org/10.1177/09610006211020081.

Girardi, I. M. T., De Moraes, C. H., Loose, E. B., & Bellmonte, R. V. (2018). *Jornalismo ambiental: teoria e prática*. Metamorfose.

Gonçalves, A. (2016). Análise de Conteúdo, Análise do Discurso e Análise de Conversação: estudo preliminar sobre diferenças conceituais e teórico-metodológicas. *Administração: Ensino e Pesquisa*, 17(2), 275-300. <a href="https://doi.org/10.13058/raep.2016.v17n2.323">https://doi.org/10.13058/raep.2016.v17n2.323</a>.

Grupo Técnico de Trabalho para Regularização dos Empreendimentos Salineiros. (2017). Relatório conjunto de avaliação técnica ambiental dos empreendimentos salineiros no estado do Rio Grande do Norte.

Hansen, A. (2019). Environment, media and communication. 2<sup>nd</sup> ed. Routledge.

Hansen, A., & Cox, R. (Eds.). (2015). The Routledge handbook of environment and communication. Routledge.

Herscovitz, H. G. (2009). Características dos portais brasileiros de notícias. *Brazilian Journalism Research*, 2(1), 102-126. <a href="https://doi.org/10.25200/BJR.v5n1.2009.197">https://doi.org/10.25200/BJR.v5n1.2009.197</a>.

Hollanda, M. (2019, January 31). Empresários querem decreto para tornar o sal de "interesse social" no RN. *Agora RN*. <a href="https://agorarn.com.br/economia/empresarios-querem-decreto-para-tornar-o-sal-de-interesse-social-no-rn/">https://agorarn.com.br/economia/empresarios-querem-decreto-para-tornar-o-sal-de-interesse-social-no-rn/</a>.

Indústria salineira quer apoio para se manter viva. (2019, February 14). *Coluna do Herzog*. <a href="https://blogcarlossantos.com.br/industria-salineira-quer-apoio-para-se-manter-viva/">https://blogcarlossantos.com.br/industria-salineira-quer-apoio-para-se-manter-viva/</a>.

Lisboa, C. (2019, June 6). Bolsonaro autoriza exploração salineira em APP no Rio Grande do Norte. *O Eco*. <a href="https://oeco.org.br/noticias/bolsonaro-autoriza-exploração-salineira-em-app-no-rio-grande-do-norte/">https://oeco.org.br/noticias/bolsonaro-autoriza-exploração-salineira-em-app-no-rio-grande-do-norte/</a>.

Loose, E. B., Lengert, M., & Cervo, M. (2022). Observatório de Jornalismo Ambiental: um projeto de extensão em prol da cidadania. *Intexto*, 53, 110698. <a href="https://doi.org/10.19132/1807-8583202253.110698">https://doi.org/10.19132/1807-8583202253.110698</a>.

Loureiro, M. R., & Pacheco, R. S. (1995). Formação e consolidação do campo ambiental no Brasil: consensos e disputas (1972-92). *RAP*, 29(4), 135-153. https://bibliotecadigital.fgv.br/ojs/index.php/rap/article/view/8267.

Maciel, A. Z. (2006). *Jornalismo Ctrl c/ Ctrl v: uso do release na comunicação da informação online* [Masters Dissertation] Universidade de Brasília. <a href="https://repositorio.unb.br/handle/10482/5530">https://repositorio.unb.br/handle/10482/5530</a>.

Macnamara, J. (2009). *Journalism and PR: Beyond myths and stereotypes to transparency and management in the public interest*. University of Technology Sidney. <a href="https://www.academia.edu/830291/Journalism\_and\_PR\_Beyond\_Myths\_and\_Stereotypes\_to\_Transparency\_and\_Management\_in\_the\_Public\_Interest">https://www.academia.edu/830291/Journalism\_and\_PR\_Beyond\_Myths\_and\_Stereotypes\_to\_Transparency\_and\_Management\_in\_the\_Public\_Interest</a>.

Melo, A. W. de, & Costa, L. (2021). O discurso ambiental que dá certo: a divulgação de releases pela assessoria de imprensa do MPF/RN e a sua reprodução fiel pelo jornalismo potiguar. *Comunicação & Informação*, 24. <a href="https://doi.org/10.5216/ci.v24.66546">https://doi.org/10.5216/ci.v24.66546</a>.

Melo, A., & Costa, L. M. (2022). The concept of social field in media discourse: The impact of salt production on the environment in Brazil. *Sur Le Journalisme, About Journalism, Sobre Jornalismo*, 11(2), 90.107. https://doi.org/10.25200/SLJ.v11.n2.2022.465

Miguel, K. G. (2012). Os paradigmas da imprensa na cobertura das políticas ambientais. Intercom - RBCC, 35(1), 111-131.

Miguel, K. G., & Machado, M. F. (2019). Jornalismo e afetos na experiência transmídia do movimento ambiental. *Revista Observatório*, *5*(4), 280-308. <a href="https://sistemas.uft.edu.br/periodicos/index.php/observatorio/article/view/5778/15501">https://sistemas.uft.edu.br/periodicos/index.php/observatorio/article/view/5778/15501</a>.

Ministério Público Federal. (2019a). *MPF quer retirada de salinas de áreas de preservação e realocação da produção do sal. Natal-RN*. <a href="https://bit.ly/3hK9D1S">https://bit.ly/3hK9D1S</a>.

Ministério Público Federal. (2019b). *MPF obtém liminar para mais uma empresa desativar pilhas de sal em área de preservação*. <a href="https://bit.ly/35OMadz">https://bit.ly/35OMadz</a>.

Ministério Público Federal. (2019c). MPF quer anular decreto que permite funcionamento de salinas em áreas de preservação. <a href="https://bit.ly/33BU9b6">https://bit.ly/33BU9b6</a>.

Ministério Público Federal. (2019d). *MPF quer impedir licenciamento ambiental para salinas em áreas de preservação*. https://bit.ly/2RxWiPh.

Ministério Público Federal. (2019e). *MPF quer impedir licenciamento ambiental para salinas em áreas de preservação*. <a href="https://bit.ly/2RxWiPh">https://bit.ly/2RxWiPh</a>.

Mourão, R. R., & Sturm, H. A. (2018). Environmental journalism in Brazil: history, characteristics, and framing of disasters. In B. Takahashi, J. Pinto, M. Chavez, & M. Vigón (Eds.), News media coverage of environmental challenges in Latin America and the Caribbean – mediating demand, degradation and development (pp. 67-90). Palgrave MacMillan.

MPF pede anulação de decreto presidencial que permite salinas em áreas de preservação ambiental no RN. (2019a, August 7). *G1 RN*. <a href="https://g1.globo.com/rn/rio-grande-do-norte/noticia/2019/08/07/mpf-pede-anulacao-de-decreto-presidencial-que-permite-salinas-em-areas-de-preservação-ambiental-no-rn.ghtml">https://g1.globo.com/rn/rio-grande-do-norte/noticia/2019/08/07/mpf-pede-anulacao-de-decreto-presidencial-que-permite-salinas-em-areas-de-preservação-ambiental-no-rn.ghtml</a>.

MPF quer desocupação de 10% de áreas ocupadas por 18 salinas no RN. (2019b, January 29). *Blog Thaisa Galvão*. <a href="https://www.thaisagalvao.com.br/2019/01/29/mpf-quer-desocupacao-de-10-de-areas-ocupadas-por-18-salinas-no-rn">https://www.thaisagalvao.com.br/2019/01/29/mpf-quer-desocupacao-de-10-de-areas-ocupadas-por-18-salinas-no-rn</a>.

MPF quer retirada de salinas de áreas de preservação ambiental. (2019c, January 29). *Blog Carol Ribeiro*. <a href="http://www.angicosnoticias.com.br/2019/01/mpf-quer-retirada-de-salinas-de-areas.html">http://www.angicosnoticias.com.br/2019/01/mpf-quer-retirada-de-salinas-de-areas.html</a>.

MPF quer retirada de salinas de áreas de preservação e realocação da produção do sal. (2019d, January 29). *Tribuna do Norte*. <a href="http://www.tribunadonorte.com.br/noticia/mpf-quer-retirada-de-salinas-de-a-reas-de-preservaa-a-o-e-realocaa-a-o-da-produa-a-o-do-sal/437503">http://www.tribunadonorte.com.br/noticia/mpf-quer-retirada-de-salinas-de-a-reas-de-preservaa-a-o-e-realocaa-a-o-da-produa-a-o-do-sal/437503</a>.

MPF quer retirada de salinas de áreas de preservação e realocação da produção do sal. (2019e, January 30). *Saulo Vale*. <a href="https://saulovale.com.br/mpf-quer-retirada-de-salinas-de-areas-de-preservação-e-realocação-da-produção-do-sal/">https://saulovale.com.br/mpf-quer-retirada-de-salinas-de-areas-de-preservação-e-realocação-da-produção-do-sal/</a>.

Observatório da Comunicação [Obercom]. (2016). *O jornalismo e as agências de notícias: os desafios das redes sociais*. Relatórios Obercom. Obercom – Investigação e Saber em Comunicação. <a href="https://obercom.pt/o-jornalismo-e-as-agencias-de-noticias-o-desafio-das-redes-sociais-2016-2/">https://obercom.pt/o-jornalismo-e-as-agencias-de-noticias-o-desafio-das-redes-sociais-2016-2/</a>.

Pott, C. M., & Estrela, C. C. (2017). Histórico ambiental: desastres ambientais e o despertar de um novo pensamento. *Estudos Avançados*, 31(89) <a href="https://doi.org/10.1590/s0103-40142017.31890021">https://doi.org/10.1590/s0103-40142017.31890021</a>.

Publicado decreto presidencial que reconhece produção salineira potiguar como bem de interesse social. (2019, June 5). *G1 RN*. <a href="https://glo.bo/3naE84P">https://glo.bo/3naE84P</a>.

Rabaça, C. A., & Barbosa, G. G. (2014). Dicionário de Comunicação. Campos.

Rocha, D., & Deusdará, B. (2005). Análise de Conteúdo e Análise do Discurso: aproximações e afastamentos na (re)construção de uma trajetória. *Alea*, 7(2), 305-322. <a href="https://doi.org/10.1590/S1517-106X2005000200010">https://doi.org/10.1590/S1517-106X2005000200010</a>.

Sampaio, C. O. C. (2014). A construção do discurso informativo na relação entre assessoria de imprensa e jornalismo: apontamentos metodológicos para análise [Doctoral Dissertation]. Universidade Federal da Bahia. https://repositorio.ufba.br/handle/ri/25185.

Schwaab, R. (2018). Jornalismo, ambiente e reportagem ampliada. In I. M. T. Girardi, C. H. De Moraes, E. B. Loose, & R. V. Belmonte, R. V. (Orgs), *Jornalismo Ambiental: teoria e prática* (pp. 69-85). Metamorfose.

Shalders, A. (2021, February 5). Com Bolsonaro, área ambiental do governo já perdeu 10% dos servidores. *BBC News Brasil*. <a href="https://www.bbc.com/portuguese/brasil-55849937">https://www.bbc.com/portuguese/brasil-55849937</a>.

Silva, D. B., Ercolani, K. M., & Calgaro, C. (2020). Reflexos da política atual no meio ambiente: uma análise sobre o esvaziamento do soft power brasileiro. *Proceedings of the Congresso de Direitos Humanos da FSG*, Caxias do Sul. <a href="https://ojs.fsg.edu.br/index.php/congressodedireitoshumanos/article/view/4473/3734">https://ojs.fsg.edu.br/index.php/congressodedireitoshumanos/article/view/4473/3734</a>.

Sindicato das Indústrias de Extração do Sal do Estado do Rio Grande do Norte & Sindicato da Indústria de Moagem e Refino do Sal do Estado do Rio Grande do Norte. (2019). *Nota à imprensa*. <a href="https://bit.ly/3jnslxE">https://bit.ly/3jnslxE</a>.

TRF5 determina que empresa reloque produção de sal localizada em área de preservação no RN. (2019, June 4). *G1 RN*. <a href="https://g1.globo.com/rn/rio-grande-do-norte/noticia/2019/06/04/trf5-determina-que-empresa-reloque-producao-de-sal-localizada-em-area-de-preservação-no-rn.ghtml">https://g1.globo.com/rn/rio-grande-do-norte/noticia/2019/06/04/trf5-determina-que-empresa-reloque-producao-de-sal-localizada-em-area-de-preservação-no-rn.ghtml</a>.

Trigueiro, A. (2005). Mundo sustentável: abrindo espaço na mídia para um planeta em transformação. Globo.

Valente, R. (2019, August 7). Decreto de Bolsonaro que poupa indústrias de sal é ilegal, diz Procuradoria. *Folha de S. Paulo*. <a href="https://www1.folha.uol.com.br/ambiente/2019/08/decreto-de-bolsonaro-que-poupa-industrias-de-sal-e-ilegal-diz-procuradoria.shtml">https://www1.folha.uol.com.br/ambiente/2019/08/decreto-de-bolsonaro-que-poupa-industrias-de-sal-e-ilegal-diz-procuradoria.shtml</a>.

Vizeu, A. (2005). *Decidindo o que é notícia: os bastidores do telejornalismo*. Universidade Federal de Pernambuco.

Watanabi, P., & Takahashi, F. (2020, December 17). Governo Bolsonaro acelera atos de impacto na área ambiental em 2020. *Folha de São Paulo*. <a href="https://www1.folha.uol.com.br/ambiente/2020/12/governo-bolsonaro-acelera-atos-de-impacto-na-area-ambiental-em-2020.shtml">https://www1.folha.uol.com.br/ambiente/2020/12/governo-bolsonaro-acelera-atos-de-impacto-na-area-ambiental-em-2020.shtml</a>.

Williams, A. (2015). Environmental news journalism, public relations and news sources. In A. Hansen, A. & R. Cox, R. (Eds.), *The Routledge handbook of environment and communication* (pp. 197-205). Routledge.

Zupelari, M. F. Z., & Wick, M. A. L. (2014). A incerteza do futuro e a questão ambiental na contemporaneidade. *Revista Eletrônica do Mestrado em Educação Ambiental*, *31*(2), 230-246. <a href="http://pepsic.bvsalud.org/scielo.php?script=sci\_arttext&pid=S2359-07692015000300013">http://pepsic.bvsalud.org/scielo.php?script=sci\_arttext&pid=S2359-07692015000300013</a>.