



# **Political-climate catastrophe and social (non-)participation: the case of the floods in Rio Grande do Sul**

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## **Abstract**

The aim of this article was to analyze the decisions and communication related to climate governance at the normative (legislation) and digital (tweets) levels during the first 30 days of Rio Grande do Sul's biggest political-climate catastrophe, which occurred in May 2024 in Brazil. Considering the emphasis in disaster research on the importance of involving social actors in recovery, as well as evidence of the ineffectiveness of corrective and preventive measures, we sought, more specifically, to identify social participation. The corrective and preventive measures adopted and communicated to society in general were analyzed. Reconstruction of Rio Grande do Sul), state (Rio Grande do Sul) and municipality (Porto Alegre). The results show differences in terms of the involvement of social actors, with the federal government being more involved; there are few measures aimed at reconstruction and no preventative measures. In the digital media, the government's narrative strategies are based on combating disinformation, victimism, and alarmism. Finally, there is a disconnection between the production of new legislation and communication on social media.

**Keywords:** Politics of climate change. Disaster governance. Socio-state interactions. Digital narratives. Imagined futures.

**Catástrofes político-climáticas e a (não) participação social: o caso das enchentes no Rio Grande do Sul**

## Resumo

O presente trabalho teve o objetivo de analisar as decisões e as formas de comunicação/subjetivação relativas à governança climática nos planos normativo (legislações) e digital (postagens) construídas nos primeiros 30 dias da maior catástrofe político-climática do Rio Grande do Sul, ocorrida em maio de 2024. Tendo em vista a ênfase das pesquisas sobre governança de desastres na importância do envolvimento de atores sociais na recuperação, bem como as evidências na inefetividade de medidas corretivas e preventivas, buscou-se, mais especificamente, identificar a participação social e as medidas corretivas e preventivas adotadas e comunicadas à sociedade em geral. Foram analisadas 517 publicações legais e 836 tuítes nos três níveis do Executivo: federal (Secretaria Extraordinária da Presidência da República para Apoio à Reconstrução do RS), estadual (RS) e municipal (Porto Alegre). Os resultados evidenciam diferenças no que tange ao envolvimento de atores sociais, sendo maior no governo federal; pouca presença de medidas voltadas à reconstrução e nenhuma medida preventiva. Nos meios digitais, as estratégias narrativas dos governantes se ancoram no combate à desinformação, ajuda emergencial, alarmismo e vitimismo. Por fim, há uma desconexão entre a produção de novas legislações e a comunicação na mídia social.

**Palavras-chave:** Políticas de mudanças climáticas. Governança de desastres. Interações socioestatais. Narrativas digitais. Futuro imaginado.

## Las catástrofes político-climáticas y la (no) participación social: el caso de las inundaciones en Rio Grande do Sul

### Resumen

El objetivo de este artículo fue analizar las decisiones y la comunicación relacionadas con la gobernanza climática a nivel normativo (legislación) y digital (tweets) durante los primeros 30 días de la mayor catástrofe político-climática de Rio Grande do Sul, ocurrida en mayo de 2024. Dado el énfasis de la investigación sobre catástrofes en la importancia de involucrar a actores no estatales en la recuperación, así como la evidencia de la ineficacia de las medidas correctivas y preventivas, buscamos, más específicamente, identificar la participación social y las medidas correctivas y preventivas adoptadas y comunicadas a la sociedad en general. Analizamos 517 publicaciones jurídicas y 836 tweets de los tres niveles de gobierno: federal (Secretaría Extraordinaria de la Presidencia de la República de Apoyo a la Reconstrucción de Rio Grande do Sul), estatal (Rio Grande do Sul) y municipal (Porto Alegre). Los resultados muestran diferencias en cuanto a la participación de los actores sociales, siendo el gobierno federal el más involucrado; hay pocas medidas encaminadas a la reconstrucción y ninguna preventiva. En los medios digitales, las estrategias narrativas del gobierno están ancladas en el combate a la desinformación, la victimización y el alarmismo meteorológico. Finalmente, existe una desconexión entre la producción de nueva legislación y la comunicación en medios sociales.

**Palabras clave:** Políticas de cambio climático. Gobernanza de catástrofes. Interacciones socio estatales. Narrativas digitales. Futuros imaginados.

## 1 Introduction

The climate emergency is one of humanity's main challenges, especially from a political and social perspective. The floods that hit Rio Grande do Sul state between 2023 and 2024 make this region one of the most affected by extreme weather events resulting from climate change in Brazil. In May 2024, out of 497 municipalities, 452 were affected, and 46 were classified under *state of calamity*, directly affecting well

over 2 million people. Events like these require a new regime of governance and political-scientific strategies that expand state intervention and its capacity to mobilize efforts from different parts of society to rebuild from the damage and to adapt to social and climate conditions. Furthermore, given these events are becoming more frequent, the most effective governance strategies must include preventive actions. Thus, the question “What do the governments of the three federative levels plan to do — beyond emergency actions — and with whom?” becomes important in this context of political-climate catastrophe.

Furthermore, it is crucial to recognize that climate disasters’ effects are unequal, hitting the poorest and least organized populations the hardest. These communities often have less capacity to voice their demands and influence political decisions, further exacerbating their vulnerability. The inequities produced by this scenario are evident: while more privileged sectors can mobilize resources and obtain faster responses, marginalized populations face more significant difficulties in accessing essential services and compensatory benefits. Along these lines, we align ourselves with the argument that it is essential to politicize climate catastrophes (Schmidt, 2024). In addition to recognizing the material effects of climate tragedies, it becomes critical to understand the political implications of government officials actions in these events in Brazil. This is especially true in territories directly implicated by recurrent extreme climate events, such as the present Rio Grande do Sul’s case.

Like other extreme events, the COVID-19 pandemic has highlighted the importance of strong and resilient public policy systems to mitigate the high-demand impacts of emergencies (Machado *et al.*, 2023). Haldane *et al.* (2021) studied the actions of 28 countries in the face of the pandemic and considered that the health system's resilience is central for governments and decision-makers to draw up effective recovery and strengthening plans. For these authors, community engagement is the central axis for organizing other qualities of the system that contribute to greater health system resilience. Similar conclusions can also be found in dealing with other epidemics, such as Ebola (Anoko *et al.*, 2020; Barker *et al.*, 2020), influenza, and similar events (Gilmore *et al.*, 2020; Schoch-Spana *et al.*, 2007), added to situations of war and armed conflict (Ekzayez *et al.*, 2020).

Moreover, from this perspective, Johnson and Olshansky (2016) study the management of community recovery after major disasters in six countries and consider participation a determining element for effective responses. Furthermore, adopting this perspective, Johnson and Olshansky (2016) conducted a comprehensive examination of community recovery management in the aftermath of major disasters across six countries. Their research posits that participatory processes constitute a crucial determinant for the efficacy of disaster response strategies.

The authors highlight a set of important principles for recovery, which involve the importance of accurate and accessible information, stakeholder involvement, and transparency to ensure public trust. The Third World Conference on Disaster Risk Reduction, held in 2015, through its document entitled Sendai Framework, recognizes that effective disaster risk reduction requires the participation and engagement of all sectors of society through a collaborative and inclusive approach.

At the national level, the criminal collapse of the Samarco Mineração dam (a company controlled by Vale S.A. and Anglo-Australian BHP Billiton) in Mariana city

(Minas Gerais state, Brazil), in November 2015 also imposed the need for emergency measures and mitigation of large-scale impacts in territories that follow the entire course of the Doce River. Lavalle and Carlos (2022) conducted an analysis of the governance model employed in response to this crime-disaster. Their findings indicate that the model operated in a predominantly top-down manner, affording minimal opportunities for substantive participation by affected individuals and communities. The researchers concluded that this approach resulted in a system that was ineffective in both the provision of benefits and services to the affected populace and in facilitating comprehensive recovery from the inflicted damage. Another finding is that medium-term actions, such as corrective/compensatory and preventive measures, were left aside.

In this article, we intend to contribute to the analysis of climate catastrophes from a political and sociological perspective. We will take as a case study the governance strategies used in government responses to the floods in Rio Grande do Sul in May 2024, recovering reflections from previous studies. More specifically, given the research results that point to the importance of participation in governance arrangements, we focus on the legal acts and narrative agency linked by the three levels (federal, state, and the city of Porto Alegre). We analyze them through the prism of social participation and corrective/compensatory and preventive measures. Although climate emergencies and disasters are becoming more and more frequent, there is still no institutional standard adopted by federal entities when it comes to medium-term actions (Dowbor; Resende; Ruscheinsky, 2023).

Before delineating our methodological approach for mapping governmental initiatives and political representatives' narratives, elucidating the analytical categories employed, and presenting the subsequent analysis. We critically examine the extant literature concerning the interrelationship between participatory processes and disaster response mechanisms.

## **2 Participation, emergencies, and disasters**

We approach climate catastrophes from a critical perspective of the social sciences of climate change at the nexus of the social studies of science and technology (Dunlap, 2023; Giddens, 2010; Stengers, 2015). Faced with the increasing effects of climate change, the conceptual boundary between environmental disaster and climate catastrophe categories (Quaratelli, 2006; Marques, 2023; Radaelli, 2024; Salmi; Fleury, 2022a) is merging and gaining new contours. Climate catastrophes<sup>1</sup> not only constitute a socio-environmental disaster but also demonstrate an unprecedented interconnectedness between planetary and local scales in their effects. These phenomena are increasingly challenging the presumed independence among social, political, ideological, and technological systems, as well as other dimensions. Following these lines, we understand the political-climate catastrophe as a phenomenon in movement and, once triggered, continuous on the timeline.

A landmark study by Johnson and Olshansky (2016) on recovery after major environmental disasters in six different countries shows that participation is a crucial

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<sup>1</sup> In the present article, we have chosen to mobilize catastrophe as the main category, despite the fact we mention disaster to respect the term used by some authors we cited.

element in these post-disaster processes. Participation implies the active engagement of affected community members, stakeholders, and other interested parties in the formulation and implementation of recovery policies. It is a practice that enables needs and priorities to be heard and, depending on governance structures, included in participatory planning.

Johnson and Olshansky (2016) give several reasons for placing participation at the center of the post-disaster reconstruction process. The researchers emphasize the paramount importance of cultivating trust between societal actors and decision-making entities, thereby enhancing transparency and facilitating effective communication. The incorporation of all relevant stakeholders in the recovery process ensures comprehensive consideration of diverse needs and concerns, thus promoting inclusivity and equity. Through enhanced interaction and organizational processes, communities develop increased resilience, thereby augmenting their capacity to survive, adapt, and recover from catastrophic events.

The authors argue that social participation ensures that decisions are based on accurate and comprehensive information gathered from various sources, including members of affected communities themselves. This is especially important for local governments, which don't have such robust information and action systems. Moreover, concerning management improvement, participation helps ensure that planning and action can occur simultaneously, which is fundamental in emergencies, as it favors continuous monitoring and adjustments as necessary. This makes the recovery process more efficient and effective (Johnson; Olshansky, 2016).

The city of Beichuan in China, whose case was reported by the authors, was seriously damaged. The lack of adequate community involvement may have contributed to reconstruction decisions that did not sufficiently consider residents' preferences, leading to the abandonment of entire areas. The reconstruction of Duijiangyan, another case considered, effectively involved many residents in housing planning after the Wenchuan earthquake (Johnson; Olshansky, 2016). These examples show that the absence of social participation can lead to reconstruction decisions that do not adequately meet the needs of affected communities. Consequently, this deficiency often precipitates avoidable failures and widespread dissatisfaction, which could have been mitigated through more substantive involvement of residents.

Participation as a trait or characteristic is not regularly part of disaster management governance arrangements in Brazil. When it comes to disasters of a technological nature, caused by large companies, the instrument is called the Conduct Adjustment Term (TAC in Portuguese), whose legislation does not deal with participation (Dowbor; Resende; Ruscheinsky, 2023).

These researchers studied four major technology disasters in the country and found that the ways they manage recovery and mitigation don't include people who were affected or their representatives. These structures are predominantly limited to the contractual engagement of civil society organizations, lacking a more inclusive governance framework. Although some degree of organizational learning is evident throughout this process, a longitudinal analysis of these cases in Brazil demonstrates the persistent prevalence of a corporate governance model. This model prioritizes corporate interests at the expense of the demands and needs of affected communities and territories.

This same dynamic is evidenced in a major study (Lavalle; Carlos, 2022) that focused on the actors' actions in the Samarco *crime-disaster* case that began with the dam collapse in 2015 in Mariana/MG. The authors show the discretion authorized by law in choosing the governance arrangement. Although acclaimed for being innovative, the system generated “public and social misgoverning”. The Renova Foundation structure, an organization set up with the sole purpose of mitigating the damage, as the backbone of the arrangement and charged with promoting and implementing more than 40 emergency, corrective, and preventive programs, did not correspond to the organization of those affected. By centralizing and insulating decision-making away from municipalities, the capacity of social actors who historically advocated for resolving demands became ineffective. The disorganization of the affected communities' decision-making capacities was caused by their exclusion from the formal governance framework, which was only partially rectified four years later (Lavalle *et al.*, 2022, p. 19). The governance arrangement's disorganizing effects on social actors' capacities relate to the slow and rudimentary services and products provided by the Foundation to address the environmental crime consequences. Even four years later, the actions implemented by Renova were of low complexity and still of an emergency and one-off nature (Dowbor *et al.*, 2022).

In emergencies, disasters, and catastrophes, the demands exceed the capacity of state resources, requiring the mobilization of volunteers, citizens, entrepreneurs, and other social actors to overcome the challenges. However, the various action fronts need to be coordinated and organized. For example, the response to Hurricane Katrina in the United States involved a combination of centralized coordination and independent actions, resulting in a response widely criticized for its disorganization and lack of effectiveness (Johnson; Olshansky, 2016).

The studies demonstrate the detrimental consequences of a lack of participation, indicating that it is crucial to ensure that post-calamity recovery is inclusive, fair, effective, and respectable. It promotes transparency, builds trust, and ensures that decisions are informed and responsive to the affected communities' needs. In other words, no one better than the community itself can help identify specific local risks and develop strategies to mitigate and overcome them.

### 3 Methodological Strategy

The reflections presented here are based on the following qualitative methodological strategies: collecting official documents in three levels of government and *netnography* on social networks (Kozinets, 2014). For the analytical stage, interpretative-critical document analysis strategies are used (Yanow, 2015). In methodological terms, the analysis approach on two simultaneous dimensions: digital/technological and legislative/normative. This offers new possibilities in terms of analysis and interpretative findings regarding how collective imaginary are constructed on digital social networks and the modes of political-climate governance. The results shown here are limited in time to the first thirty days of the political-climate catastrophe.

Analyzing official documents helps us understand whether and how social participation is incorporated into public policies. This strategy allows us to assess the formal and legal structure that underpins social participation and identify the

mechanisms provided for including different social actors in the planning, execution, and evaluation stages of social participation.

Social media *netnography* offers a contemporary and dynamic lens on public discourse and makes it possible to analyze how political leaders communicate with non-governmental actors. This approach is particularly relevant in the current context, where digital social networks play a crucial role in mobilization, public engagement, and opinion formation. Together, these methodological strategies provide a more articulate understanding of the mobilization and inclusion of social actors in government actions, combining formal and institutional analysis with constructing meanings through public climate narratives.

The data was collected from the following digital channels: 1) official websites — Official Gazettes (“Diário Oficial” — DO for its acronym in Portuguese) and 2) official accounts of government officials in the three levels of Federation. The time frame was between April 30 and May 31, 2024, i.e., the first thirty days of the ongoing climate-political catastrophe.

The documentary collection method was used for the first channel, which was carried out on the following official websites: federal government, Rio Grande do Sul state, and Porto Alegre City Hall. The documentary analysis technique was used, examining legislation authored by the Executive at the Federal, State, and Municipal levels — such as decrees, laws, resolutions, and ordinances — relating to actions to deal with the tragedy in Rio Grande do Sul. All the documents published in the Official Gazette that contained at least one of the following descriptors — “disaster”, “flood”, “reconstruction”, “climate” — were analyzed to identify the governance arrangements built to deal with the catastrophe, in terms of social participation and the corrective and preventive actions taken. This represents a total of 517 legal publications, 283 from the Federal Executive, 190 from the State Executive, and 44 from the Municipal Executive.

For the second channel, the digital *netnography* method was used, with daily monitoring of the account, followed by data scraping on the *Application Programming Interface* (API) of the X platform (formerly Twitter) through tweet mining with the “twilit” package (Salmi; Trindade, 2024), which resulted in 836 tweets from the three levels.

The *corpus* of 836 tweets was mobilized to identify the presence of human and other-than-human<sup>2</sup> actors and to capture corrective and preventive measures using the same descriptors used to analyze the documents in the DOs. Part of the methodological strategy was to use the legislation analysis findings on participation (Table 1), which were applied to the corpus of 836 tweets using the empirical categories identified and divided by each federative level. At the federal level, the following keywords associated with participation were applied to the total *corpus* of tweets: “dialog”, “civil society”, “partner”, “FORSUAS” (Protection Force of the Unified Social Assistance System in Rio Grande do Sul), “Forum”, “caravans”, “affected families”. For the state level: “civil society”, “FUNRIGS” (Rio Grande Plan of the Program for Reconstruction, Adaptation and Climate Resilience of the State of Rio Grande do Sul), “Council”, “Trade Unions”. For the municipal level: “CMDCA”

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<sup>2</sup> We mobilize non-human, more than human and other-than-human actor/agent as similar notion.

(Municipal Council for the Rights of Children and Adolescents), “OSC” (Civil Society Organizations), “partner” and “CMI” (Municipal Council for the Elderly).

From the corpus of 72 tweets, posts with number of interactions above 100,000 (one hundred thousand) views were mobilized for in-depth critical narrative analysis. The criterion of one hundred thousand interactions per post was defined based on a comparison between the average number of interactions in the last thirty days before the climate-political catastrophe in Rio Grande do Sul and the number of interactions on the first day after the start of the extreme weather event on May 29, 2024. In the sixty posts with the most interaction on Governor Eduardo Leite's X profile (formerly Twitter), the average<sup>3</sup> number of views was 10,600 per post, with only one above 100,000 — about soccer (Leite, 2024a) — and the six posts from May 30, 2024, have an average of 96,500 interactions per post. This criterion was established as a cut-off point for the three federative levels.

### 3.1 Analysis Categories

As shown above, the participation of broad sectors of civil society, especially those affected and the organizations that represent them, is a critical element for the effectiveness of public recovery policies. We understand participation here as the actors' involvement in consultative and decision-making bodies of government initiative, a focus that recognizes the construction of the participatory institutions architecture in Brazil (Isunza Vera; Lavalle, 2012). Concerning the content of these measures, we acknowledge the humanitarian significance and critical necessity of emergency interventions to which both governmental entities and civil society organizations, along with individual volunteers, have demonstrated unwavering commitment—a domain that inherently merits comprehensive scholarly investigation (Abers; Büllow, 2020). Our analytical focus, however, was directed towards two alternative typologies of action: preventive measures (such as adaptation strategies) and corrective interventions (encompassing compensatory mechanisms, reconstruction efforts, and mitigation strategies), with particular emphasis on examining the role and extent of social actors' participation within the proposed governance frameworks.

The question is what the three levels of the government plan to do, how and with whom, beyond the emergency actions that we understand as activities to immediately correct the public calamity situation (Porto Alegre, 2024) — such as the “provision of hydrojetting (water jetting) services to clean streets, avenues, and sidewalks in area 06, affected by the flood of May 2024” by the Water and Sewage Department of Porto Alegre. As we shall see, decisions on governance arrangements for reconstruction occur during the first few days and provide clues for future processes.

Focusing on the other two dimensions of action allows us to observe the actions of governments concerning the measures that, once the phase of high visibility of the disaster in the media has passed, will or will not be taken to (re)build and compensate for the damage and to prevent future disasters or their more damaging consequences. Thus, based on previous work (Dowbor; Resende;

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<sup>3</sup> Average made from June 1<sup>st</sup>, 2024, of the disaster in progress.



Ruscheinsky, 2023), we use the term corrective measure as “broad compensatory measure” that means “for any and all measures, economically measurable or not, which intends to eliminate or minimize the consequences of the damage caused by the disaster, whether in the social, economic, cultural and/or environmental dimension.” (ibid. 2023b, p. 115).

Unlike corrective measures, preventive measures aim to avoid future catastrophes that have already been envisioned through projections and scenarios, as well as avoiding the most damaging outcomes of similar future extreme climate events. These preventive actions result from the construction of *coordinated imagined futures* by social groups (Adloff; Neckel, 2021). At this point, the category of imagined climate future *inscribed in the present* (Salmi; Fleury, 2022b) is essential for broadening our understanding of how government officials and decision-makers forge preventive measures in the present based on imagined futures in the rain of the moment — or in other words, in the climate heat of the moment.

## 4 Results and Analysis

### 4.1 Normative-Institutional Acts

In this stage, we aim to identify the social actors and strategies used in the governance processes for climate mitigation and adaptation in Rio Grande do Sul in legislation authored by the executive branch at federal, state (Rio Grande do Sul) and municipal (Porto Alegre) level. Of the 517 legal publications analyzed, only 10 mentioned social actors, in particular, non-state ones. These publications (one provisional measure, one law, four resolutions, and four ordinances) can be seen in Table 1.

Chart 1 — Legislative production by the Executive in the three levels and social participation in the ongoing political-climate disaster

Federal	<p>— Provisional Measure 1.220, 15/05/2024 — Creates the Extraordinary Secretariat of the Presidency of the Republic to Support the Reconstruction of Rio Grande do Sul. The Secretariat's areas of activity include dealing with public calamities and supporting the reconstruction of the state through dialogue with the government, including the establishment of partnerships and the promotion of technical studies with universities and other specialized public and private bodies or entities.</p> <p>— MDS Ordinance<sup>4</sup> 988, 23/05/2024 — Authorizes the use of the remaining balances of the Basic and Special Social Protection Financing Blocks and the Temporary Increase Programs to attend to calamity and emergencies in the municipalities of RS. The funds must be used for each service but may also be used for actions carried out with families in temporary accommodation to develop certain objectives, including mobilizing and organizing processes for the participation of affected families</p> <p>— MDS Ordinance 991, 28/05/2024 — FORSUAS/RS will be able to articulate with federal, state, district, and municipal bodies and entities, as well as with civil society organizations, agencies, and international organizations, the provision of physical structure facilities, human resources, transportation, food, logistics, training and other actions inherent to FORSUAS/RS's attributions.</p> <p>— MAPA Ordinance<sup>5</sup> 683, 28/05/2024 — Establishes the Emergency Agribusiness Reconstruction Program in RS and the Itinerant Cabinet. The action will concentrate on technical assistance and rural extension caravans involving public and private universities, federal institutes, and other educational institutions working in agricultural sciences and similar areas of knowledge.</p> <p>— Ordinance SG/PR<sup>6</sup> 181, 28/05/2024 — Establishes the Social Participation Forum in RS, intending to articulate social participation in the affected municipalities. The Forum will comprise 50 representatives of organizations and social movements operating in Rio Grande do Sul, appointed by the civil society members of the Presidency's Social Participation Council.</p>
State	<p>— CEI Resolution 03/2024, 20/05/2024 — Authorizes the use of up to R\$6,000,000.00 from the State Fund for the Elderly to hire a Social Organization (CSO)/Civil Society Organization to identify and register vulnerable elderly people living in the affected municipalities and purchase and deliver essential items.</p> <p>— Law 16,134, 24/05/2024 — Established a collegiate body, the Rio Grande Plan — Program for Reconstruction, Adaptation and Climate Resilience of the State of Rio Grande do Sul and the Rio Grande Plan Fund (FUNRIGS). FUNRIGS will have a Board, with advisory powers and oversight of the use of resources, made up of members appointed by the Governor of the State, ensuring the participation of representatives: I — two universities and two technology centers; II — a business representative entity from the civil construction, logistics infrastructure, industry, commerce, agriculture and livestock, and services sectors; III — three urban workers' unions and three rural entities; IV — an environmental entity; V — the Federation of Rio Grande do Sul Municipal Associations; VI — the Riograndense Press Association.</p>

<sup>4</sup> Ministry of Development, Social Assistance, Family and Fight against Hunger (MDS).

<sup>5</sup> Ministry of Agriculture and Livestock (MAPA).

<sup>6</sup> General Secretariat of the Presidency of the Republic (SG/PR).

Municipal	<p>— CMDCA Resolution 050/2024, 16/05/2024 — Emergency approval of a financial contribution of 30%, limited to R\$50,000.00 per CSO, for the costs of consumables, hygiene, and food.</p> <p>— CMDCA Resolution 052/2024, 16/05/2024 — Approve the hiring of two vehicles via a partner CSO, for a service structure, to support the public policy for children and adolescents weakened by the disaster.</p> <p>— WCC Resolution 026/2024, 17/05/2024 — Emergency approval of a 30% addendum to the terms in force, limited to R\$50,000.00 per CSO, for expenses on consumables, hygiene, food, and mattresses.</p>
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Source: authors. From the Official Gazettes of the Federal Government, Rio Grande do Sul State and Porto Alegre City Hall.

An analysis of the decrees through the prism of participation (Table 1) reveals differences between the three federative levels, both quantitative and qualitative. Regarding the number of structures created or recreated, the party's ideological stance on participation matters. The federal PT government developed more actions (5 in total) in this direction, continuing the way of governing that promoted participation (Bezerra, 2020). Participation includes the provision for dialogue with civil society (Provisional Measure No. 1.220, of May 15, 2024), establishing partnerships (such as technical caravans involving universities), articulating actions (MDS Ordinance No. 991, of May 28, 2024), financing the very process of mobilizing and organizing the participation of affected families (MDS Ordinance No. 988, of May 23, 2024) to the construction of its forum for broad participation, such as the Social Participation Forum in Rio Grande do Sul State (SG/PR Ordinance No. 181, of May 28, 2024), which is to be made up of 50 organizations representatives and social movements active in the State of Rio Grande do Sul.

The Eduardo Leite government (Brazilian Social Democracy Party — PSDB in Portuguese) presented two measures in which social actors appeared. One (Law no. 16.134, of May 24, 2024), a collegiate body was set up, the Rio Grande Plan — Program for Reconstruction, Adaptation and Climate Resilience of Rio Grande do Sul State, and the Rio Grande Plan Fund (FUNRIGS) was created, which provides for a series of participations by specific segments (two universities and two technology centers); an organization representing businesses in the construction, logistics infrastructure, industry, commerce, agriculture and livestock, and services sectors; three urban workers' unions and three rural organizations; an environmental organization; the Federation of Municipal Associations of Rio Grande do Sul (FAMURS); and the *Rio Grande do Sul* Press Association). However, this action does not include the participation of those affected and their organizations or movements, which the unions could only partially represent. Another initiative to involve civil society organizations stems from Resolution 03/2024 of the CEI — State Council for the Elderly, which allocates funds to an organization to identify and register vulnerable elderly people living in municipalities with a Public Calamity Decree.

The mayor, Sebastião Melo (Brazilian Democratic Movement — MDB in Portuguese), mayor of Porto Alegre, issued three measures through the resolutions of two councils, which authorized the use of its resources by social organizations (Resolution 050/2024 of the Municipal Council for the Rights of Children and Adolescents, of May 16, 2024, and Resolution 026/2024 of the Municipal Council for the Elderly, of May 17, 2024) or hiring vehicles through the partner civil society

organization (Resolution 052/2024 of the Municipal Council for the Rights of Children and Adolescents, of May 16, 2024). It is noteworthy that the same municipal administration announced on May 13th, which falls within the temporal scope of this research, a contract with the consulting firm Alvarez & Marsal. As the mayor justified, this was done to ensure comprehensive access to technical expertise.<sup>7</sup>

In short, the party and its ideological position on participation matter (Bezerra, 2020). In this context, the few participatory measures were primarily observed during the Lula administration of the Workers' Party (Partido dos Trabalhadores — PT in Portuguese), which is situated on the left of the ideological spectrum, than in the Eduardo Leite governments, from the Brazilian Social Democracy Party (PSDB), and Sebastião Melo, from the Brazilian Democratic Movement (MDB), both center-right. It's important to stress that being in an emergency doesn't mean that the leaders aren't planning how to take corrective and preventive action. Although they don't voice them to society, as we shall see, they build structures to project actions into the future. What sets them apart is precisely their democratic openness to reconstruction based on participation. The further to the right, the less or no involvement of actors representing those affected and the greater the presence of economic actors.

Table 2 shows the corrective and preventive plans identified in the legislation produced by the Executive at the Federal, State, and Municipal levels for climate mitigation and adaptation in Rio Grande do Sul. From the corrective perspective, at the federal level, there were announcements of specific plans (social protection and agribusiness), at the state level the creation of a broad plan called “Plano Rio Grande — Programa de Reconstrução, Adaptação e Resiliência Climática do Estado do Rio Grande do Sul” (Rio Grande do Sul State Climate Reconstruction, Adaptation and Resilience Program) and a financial aid program for victims living in the Rio Grande do Sul municipalities, and finally, at the municipal level, a fundraising plan. There are no initiatives aimed at preventing new catastrophes. Concerning social participation, the five programs are similar, as they generally do not provide for the participation of civil society organizations or, when such participation is contemplated, the provisions remain vague and insufficiently defined.

Chart 2 — Corrective and preventive measures mentioned in the legislation in the three levels

level	Corrective action	Preventive measure
Federal	“FORSUAS/RS”, “Emergency Program for the Reconstruction of Agribusiness in the State of Rio Grande do Sul and the Itinerant Cabinet”	None
State	“Back on Track Program [Volta por Cima in Portuguese]”, “Rio Grande Plan”	None
Municipal	“Project for the public calamity resulting from the floods”	None

Source: Authors. From the Official Gazettes of the Federal Government, the State of Rio Grande do Sul, and Porto Alegre City Hall.

<sup>7</sup> Hiring consultants (by donating services) didn't make it into our database because the text didn't contain any of the keywords used in the search.

More specifically, at the federal level, MDS Ordinance No. 991 of May 28, 2024, established a coordinated strategy for social assistance emergency actions in the Rio Grande do Sul state called the Protection Force of the Unified Social Assistance System in Rio Grande do Sul (FORSUAS/RS), to act in preparation, response and recovery actions, as well as to guarantee social protection for the affected population. The participation of civil society organizations in this strategy is only provided in general terms.

Finally, MAPA Ordinance No. 683, of May 28, 2024, establishes, within the scope of the Ministry of Agriculture and Livestock, the Emergency Agribusiness Reconstruction Program in the Rio Grande do Sul and the Itinerant Office, which aims to help re-establish agricultural activities in the state. The technical assistance and rural extension caravans provided in the Ordinance will 'involve' educational institutions that work in agricultural sciences and similar areas of knowledge.

At the state level, Decree No. 57,607 of May 9, 2024, created the “Back on Track Program [*Volta por Cima*]” and instituted financial aid for victims of contingencies resulting from heavy rains and floods in Rio Grande do Sul in 2024. In summary, this is an initiative specifically focused on providing financial assistance to victims domiciled in municipalities of Rio Grande do Sul where a state of public calamity or emergency resulting from these events has been officially decreed or endorsed by the State, and, consequently, the negotiations are limited to the Treasury Secretary, the Secretary of Planning, Governance and Management, and the Secretary of Social Development. Civil society organizations are not involved in this strategy.

Yet, State Law No. 16,134, of May 24, 2024, authored by the Executive Branch of the Rio Grande do Sul government (PL 133/2024), established the Rio Grande Plan — Program for Reconstruction, Adaptation and Climate Resilience of the State of Rio Grande do Sul, and created the Rio Grande Plan Fund (FUNRIGS). The Plan aims to “plan, coordinate and implement the actions needed to deal with the social, economic and environmental consequences of climate events in Rio Grande do Sul in 2023 and 2024”. The purpose of the Fund is to segregate, centralize, and raise funds to deal with the social, economic, and environmental consequences of these climate events. As noted, representatives from different sectors are expected to participate, including universities and urban and rural workers' unions.

Finally, at the municipal level, Resolution 046/2024, of May 15, 2024, of the Municipal Council for the Rights of Children and Adolescents of Porto Alegre (CMDCA) approved the project for fundraising, “Project for the public calamity resulting from the floods”, which will raise funds through FUNCRIANÇA<sup>8</sup>, and also through FUNDOLIDOSO<sup>9</sup>, the latter conformed in Resolution 025/2024, of May 17, 2024, of the Municipal Council for the Elderly. In this case, because they are councils, both initiatives concern decision-making that includes civil society and municipal government representatives.

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<sup>8</sup> Municipal Fund for the Rights of Children and Adolescents (Funcriança). Created in 1991 by the Porto Alegre Municipal Council for the Rights of Children and Adolescents (CMDCA).

<sup>9</sup> Municipal Fund for the Elderly — FUNDOLIDOSO. Managed by the Municipal Council for the Elderly.

## 4.2 Cyber-institutional narratives

The Executive at the federal, state, and municipal levels (Table 1) constructed these narratives in the governance processes for climate mitigation and adaptation for Rio Grande do Sul. During this stage, our objective is to identify the human and other-than-human social actors and narrative lines that were mobilized (Table 2) in the official accounts on the X platform (formerly Twitter).

Table 1 — Metrics of rulers in digital narratives about the political-climate disaster

level	Institution	Position	Ruler, count on X	Follow- res (thousand) in X	Number of tweets in the period (32 days)				
					n. total tweets	n. vis. total (million)	n. selected tweets*	average (thousa nd), vis./ tweet	n. vis. (million)
Federal	Extraordinary Secretariat to Support the Reconstruction of Rio Grande do Sul	Minister-Chief	Paulo Pimenta, @Pimenta13Br	618	536	17,3	25	215	5,4
State	Government of Rio Grande do Sul	Governor	Eduardo Leite, @EduardoLeite_	261	94	22,0	36	493	17,2
Municipal	Porto Alegre City Hall	Mayor	Sebastião Melo, @SebastiaoMelo	58	206	5,4	11	160	1,8
<b>Total</b>	-	-	-	<b>937</b>	<b>836</b>	<b>44,7</b>	<b>72</b>	-	<b>24,4</b>

Source: Authors. From official accounts on the X platform (formerly Twitter). Caption: vis.: views; MST: Landless Social Movement. Note: (\*) Selected tweets with over 100,000 views between April 30 and May 31, 2024.

Out of the 836 tweets analyzed in the three federative levels, 72 contained more than 100,000 views, which is considered to be a space with a high density of meaning-making due to the above-average distribution before the political-climate catastrophe. It should be noted that the selected tweets correspond to 1) a minimum of one-third of the total views of each leader (> 30%) and 2) concerning the combined tweets of these three leaders, fifty-five percent of the total views (55%) in the period analyzed. It should also be noted that there were peaks of interaction with tweets with more than one million views (Two from Pimenta, six from Leite, and one from Melo).

These posts mention human and other-than-human actors (all of them, non-state actors), but they point to only six actors: five human and just one other-than-human (Table 2). Regarding the narrative lines, four were identified as: 1) combating disinformation, 2) communicating aid, 3) meteorological alarmism, and 4) a sense of self-victimization as victimism.

Table 2 — Social actors and corrective and preventive measures in tweets

level	Ruler in X	Social actors (beyond the state)	Corrective action	Preventive action	Narrative line
Federal	@Pimenta13Br	Three tweets (social movement MST, artist Madonna and digital influencer Felipe Neto)	“My House, My Life”, Tweet 16 May 2024	none	Combating disinformation and communicating aid
State	@EduardoLeite_	Three tweets (businessman Elon Musk, doctor Leandro Medice, horse Caramelo)	“Rio Grande Plan: Innovation, Adaptation, and Climate Resilience”, Tweet May 17, 2024	none	Victimism and meteorological alarmism
Municipal	@SebastiaoMelo	zero tweet (no mention)	“Rebuilding POA”, Tweet May 31, 2024	none	Victimism and meteorological alarmism

Source: Authors. From the official accounts on the X platform (formerly Twitter).

From the empirical data on social participation in cyber-institutional narratives (Table 2), we extracted social actors mentioned by the three leaders and any corrective and preventive measures, excluding emergency measures.

Regarding the federal government, there is only one mention of corrective action. It is announced that the “My Home My Life [Minha Casa Minha Vida] Band I and II program is for people with incomes of up to R\$4,400, which means 93% of the population. All the people who have lost their homes, who have no way of recovering their homes, will receive a home free of charge.”<sup>10</sup> (Pimenta, 2024). It is essential to note that this measure — “Minha Casa Minha Vida faixa I e II” — was not published as a normative act in the Federal Official Gazette during the period analyzed by this study, i.e., there is a disconnect between the discourse (in the social media) and the practice (normative).

Minister Pimenta's efforts to build the *imagined climate future* in the collective imagination for Brazil and especially for the affected communities can be summed up on two major fronts: 1) combating disinformation (e.g., “Madonna's concert didn't receive any money from the Federal Government”, “Share the truth: ANTT didn't stop any trucks with donations”, “I denounce the fake news that hinders the work of rescuing lives”, “they try to intimidate us with lies”) and 2) communicating emergency aid (e.g., mobilization of the SUS field hospital, the Multipurpose Ship “Atlântico” and the Armed Forces). Our analysis also indicates that Minister Pimenta did not mobilize the ordinances and provisional measures issued by this federal level (Chart 1) as narrative content in the digital territory (platform X).

The social actors mentioned in this level are associated with an *emancipation* utopia (Landless Social Movement — MST), *voluntarism* logic (donation of purifiers by YouTuber Felipe Neto), and the fight against disinformation (mention of the federal government not donating to the Madonna concert in Brazil).

As for the state government, Figure 1 presents a proposal for governing the political climate crisis in Rio Grande do Sul as a *narrative for building the imagined climate future, without mentioning* any social actors in the bodies that make up this

<sup>10</sup> Tweet from May 16, 2024, with 97.5 thousand views that was selected due to its governance content.

new structure. On his X (formerly Twitter) profile, he has 260,400 followers, and this post reached 187,500 views or 72% of his followers.

Figure 1 — Institutional-narrative content proposed by the Governor of Rio Grande do Sul on the ongoing climate-political disaster



Source: Authors. From the tweet about the “Rio Grande Plan” (Leite, 2024b).

In the “Rio Grande Plan: Innovation, Adaptation and Climate Resilience” (Leite, 2024b), the Governor highlights some corrective measures focused on housing, infrastructure, and economic recovery carried out in financial partnerships with “private entities and multilateral banks”. The lack of mention of any disaster prevention or climate adaptation measures is striking — the “actions focused on the long term” are “infrastructure reconstruction” and not adaptation and/or disruptive solutions to the current socio-political and economic regime.

In terms of narrative, the emphasis is anchored in two logics: (1) victimism masquerading as climate denialism (e.g., “What the Rio Grande do Sul is going through is unprecedented in its history”, “Those who have already been victims of tragedy cannot be victims of lack of assistance”, “SOS RIO GRANDE DO SUL (PIX)”) mediated by (2) meteorological *alarmism* (e.g. “The Caí River is going to exceed flood levels in the next few days”, “The Guaíba River level is expected to exceed 5 meters today”, and “The current event will be the biggest climate disaster our state has ever seen”). This double logic of *victimism* combined with meteorological *alarmism* shows the denial of science. This is a strategy to anchor the present disaster as something unforeseeable by the actors of the past, and also to produce an imaginary of the effective ruler in an emergency. Climate denial is achieved by omitting the use of scenarios projected by scientists on the climate issue, both in Brazil and in RS. This denial is combined with the invisibilization of the effects of the previous year's events in Rio Grande do Sul itself<sup>11</sup>. This same climate-political denial occurs by making invisible the environmental dismantling of previous years carried out by these same leaders at the municipal and state levels. At the bottom line, the governor's framing is related to a systematic climate denial framework.

<sup>11</sup> In September 2023, 54 people died due to the effects of storms in the state of RS. In all, three climate disasters occurred in the state (June, September, and November) with fatalities.



The mention of three social actors mentioned by the Governor (businessman Elon Musk, doctor Leandro Medice, and the horse Caramelo) are associated with neoliberal ideology (a mega-businessman and a liberal professional) and the society-nature logic. The latter is unusual in the speeches of Brazilian politicians, since the notion of the rights of nature as a political vector is a phenomenon in countries in the Andes (e.g., Bolivia and Colombia).

By strategically invoking multibillionaire Elon Musk and highlighting the donation of Starlink satellite antennas—a technological asset from one of his prominent technology enterprises linked to the Big Tech industry—the Governor initiates a discursive process of constructing a narrative that systematically valorizes the pivotal role of private sector interventionism and neoliberal economic rationalities within emergency response mechanisms. In this sense, the future is technological — which fosters a continued digital extractivism that belongs to the neoliberal ideology of the *Big Techs* — since the political and narrative state structures are unable to forge other presents and futures for Brazil.<sup>12</sup>

A relevant point when building a collective imaginary with political content is the mobilization of a non-human agent — in this case, the horse named *Caramelo* elevated to the symbol of emergency action. As Merlinsky (2021) points out, in situations of socio-environmental disasters over large areas, the mobilization of non-humans generates new political spaces as well as forging other collective action imaginaries. In our case, the non-human agent (*Caramelo*) has two social roles: 1) as the core of the sense of animal victimism (dogs, cats, birds and other animals placed as victims who need immediate help in the face of an “unforeseen” political catastrophe — at least not for the rulers) and 2) as the guiding element of the collective imaginary that aims to anchor the *imagined climate future* only in emergency actions and not in preventive measures. We emphasize that certain imagined futures incorporating a neoliberal ideological agenda are constructed without the public's knowledge, such as by engaging the consultancy Alvarez & Marsal.

Finally, concerning the municipal level, a reconstruction mechanism (corrective measure) is mentioned: the “Reconstruct Porto Alegre [Reconstruir POA]” platform. This post mentions that “it is possible to see a map of public facilities damaged by the floods and in need of renovation so that companies can adopt them.” (Melo, 2024). However, the narrative content, as in the state level, focuses on the logic of victimism, also anchored in climate denialism, mediated by meteorological alarmism (as a narrator of the ongoing tragedy — a role in which the ruler shifts from being responsible for past actions/omissions under his management to that of a meteorological speaker). *Victimism* (“In this challenging scenario of rescues and shelters, the solidarity of our people warms the heart”, “With deep sorrow, I receive from @SSP\_RS the confirmation of 3 deaths in Porto Alegre resulting from the catastrophe that affected our state and the Capital”) combined with meteorological alarmism (e.g., “According to the *Climatempo*, the weather is not good”, “According

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<sup>12</sup> A symptomatic case is the dispute over the (non-)regulation of artificial intelligence and social media in Brazil in the National Congress. Bill 2338 of 2023, which provides for the use of Artificial Intelligence, and the current Big Tech lobby is evident in Brazil. This case was also discussed in “WG 18 — Datification, platformization and artificial intelligence: public policies, scientific agendas and socio-political challenges” (ESOCITE LA, 2024).

to Climatempo, heavy rain is forecast for the next few hours” and “despite the great effort to contain it, the dam on the Gravataí River, next to FIERGS, has started to overflow again”) forges a kind of collective imaginary similar to the one fostered at the state level.

As both (the Mayor and the Governor) were heavily involved in *anti-environmental* and *anti-climate* strategies before the catastrophe, the construction of the victim imaginary is in line with their neoliberal ideologies, both in terms of mobilizing companies to carry out the reconstruction and in terms of shielding the dismantling of environmental legislation (e.g., curtailing the budget for maintaining basic infrastructure to protect against events of this type, such as rainfall and flooding predicted to be above historical averages) that occurred before May 2024.

Based on the cross-analysis between the empirical expressions (Table 1) and their correspondence in the corpus of 836 tweets, no correspondence was found except for “FUNRIGS” (Rio Grande Plan Fund), created by Law No. 16,134, 24/05/2024, and mentioned in the “Rio Grande Plan: Innovation, Adaptation and Climate Resilience.”

Ultimately, the government constructs two significant visions, one for the populace and the other for the private sector. On the one hand, the focus of the government is on building and maintaining a collective imaginary based on a narrative of victimhood oriented towards a non-future (e.g., without preventive measures) for the population in general. In this regard, it is imperative to “save lives” and “avoid locating guilty parties”. However, these leaders enter into alliances with private corporations to forge imagined climate futures in which they legitimize themselves in a symbolic position as saviors of the “unprecedented” climate catastrophe. The saviors are those companies who sign contracts for reconstruction. Those in power claim to be controlling this catastrophe, produced in large part by their own political action/omission (e.g., dismantling of the RS Environmental Code by the Governor; withholding of funds from the Municipal Water and Sewage Department by the Mayor).

In summary, within the narrative framing analysis, the following key observation emerges: 1) a narrative disconnection between the federal, state and municipal spheres of government, manifested both in substantive content and in the orientation of corrective and preventive actions; 2) concerning preventive actions, they are launched into an armored future, i.e., they ignore any kind of structured action to think about the lessons learned from the ongoing catastrophe in the face of experiences in other parts of the planet. The expression “now is not the time to find culprits” is the cherry on the cake of this kind of necropolitics’ imaginary.

Finally, 3) civil society is made invisible as an active political agent, i.e., the narrative of the three federative levels is based on the logic of the objectified citizen, i.e., as a volunteer (i.e., transformed into mere instruments) and not as an agent formulating public policies capable of reflecting and building new and other policies beyond the current policies of deregulation led primarily at the municipal level (the advance of Porto Alegre's real estate industry) and at the state level (the dismantling of the Environmental Code by the state of Rio Grande do Sul — e.g., Ferraz; Becker, 2024). If there is an opportunity to participate in the narratives, it is individualized, immediate, and uncoordinated participation.

## 5 Conclusions across the three federative levels of government

In the flood of emergencies, both in the literal and figurative sense of the expression, the governing authorities across the three analyzed levels—federal, Rio Grande do Sul state, and the municipality of Porto Alegre—were already developing, to some degree, governance structures for the recovery of the political-climatic catastrophe in May 2024. The profile of these structures and decisions varied and differed concerning the main research question, namely the involvement of social actors in the governance model under construction. Social participation within these plans varied, as we showed in the analysis, according to the ideological profile of the party in executive power — being greater in the Workers' Party (PT) at the federal level, more restricted in the Brazilian Social Democracy Party (PSDB) at the state level, and practically non-existent in the Brazilian Democratic Movement (MDB) at the municipal level.

Regarding the reconstruction plans and programs and their corrective and preventive content, the Leite government stood out with the most comprehensive plan for corrective measures (“Rio Grande Plan”). At the same time, the federal level emphasized social protection and agribusiness. Concerning preventive measures, the “Rio Grande Plan” signaled something associated with the “RS of the Future”. The “Reconstruir POA Plan”, only announced on May 31 at the municipal level, focused on companies and also did not mention social actors in these processes of formulating policies to prevent new climate disasters.

At the narrative level, as captured through messages on the X platform (formerly Twitter), the governing authorities across the three governmental spheres did not transform social participation or the recovery plans already embedded in existing legislation into substantive content within this high-reach social media network. The exception was Governor Eduardo Leite with his “Rio Grande Plan”, whose specific tweet reached almost two hundred thousand views, twenty times more than his average number of interactions. In other words, the social actors who could be shaping public policies for disaster recovery, whether in terms of corrective or preventive measures, were not vocalized and promoted on social media. Based on this, we can say that during the period analyzed, there was no creation of spaces in the collective imagination to formulate preventive or corrective public policies with the affected communities and other civil society actors. Even at the federal level, which published measures with the possibility of a Social Forum and Social Council, there was no communication or dissemination to society or a call for social participation. Society in general and citizens were objectified and, we stress, considered unworthy of being actors in formulating recovery policies.

It is worth noting that the analysis of the narrative plan based on the tweets also shows the difference in communication strategies: the federal level focused on the systematic fight against disinformation, and the state and municipal levels on the construction of victimization strategies combined with strong communication about weather conditions.

It's important to stress that being in an emergency doesn't mean that government leaders don't plan how to take corrective and preventive action. Although they don't make them known to society in general, our study strongly suggested that they build structures to selective plan actions. What sets them apart

is precisely their democratic openness to reconstruction based on participation. The further to the right, the less or no involvement of actors representing those affected and the greater the presence of economic actors.

Our analysis of government responses to the floods in Rio Grande do Sul reveals the urgent need for greater inclusion of social actors in climate governance processes. The effective participation of civil society organizations and affected individuals is crucial for the effectiveness of emergency, corrective (compensatory), and preventive actions. Furthermore, the role of social networks in mobilizing and engaging the public cannot be underestimated. We hope this study will contribute to formulating more inclusive and effective public policies and inspire future research on the issue of social participation in situations of emergencies and predicted and foreseeable social, environmental, and climate disasters. After all, the present is imposing itself, and it's past time to forge other ways of thinking and being in a world of worlds crossed by social, political and climatic collapses with catastrophes of all kinds.

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