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ARTICLE

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Climate change and attribution in Italian TV news coverage of the Emilia-Romagna flood: a missing story?

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ABSTRACT

While extreme weather events may make climate change feel more immediate and personally relevant, this potential depends largely on how such events are framed in the media. This article examines how Italian prime-time television news covered the May 2023 floods in Emilia-Romagna, focusing on the salience of climate change, the framing of causal attribution, the visibility of political and scientific actors, and the presence of obstructionist narratives. Drawing on a mixed-methods content analysis informed by framing theory, the study analyzes 1,017 television news reports broadcast on Italy's main channels in 2023. The findings show that climate change was rarely mentioned in coverage of the floods and even less frequently framed as a causal factor. Explicit discussions of causality were generally limited and, when present, were more likely to attribute responsibility to failures in land or emergency management than to climate change. Political actors dominated the coverage, whereas scientists appeared mainly in segments explicitly addressing climate change. A qualitative analysis of the 29 news items that identified climate change as a cause of the floods further reveals the presence of obstructionist frames that downplay systemic responsibility and discourage climate action. The study contributes to research on climate communication, climate and attribution framing, and climate delay discourse, while also providing new evidence from a media context that remains highly influential but has received relatively limited scholarly attention.

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Introduction

Climate change is widely recognized as a pressing global issue, yet it often struggles to gain prominence in public perception and political agendas. This is largely due to its abstract, long-term, and cumulative nature, which makes it difficult for individuals to grasp through direct experience. The phenomenon unfolds gradually, varies across space,

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and involves complex causal dynamics that are not easily linked to everyday life (Van der Ven and Sun 2021). As a consequence, public engagement remains limited.

At the same time, natural disasters are becoming increasingly frequent, exposing a growing number of people to the tangible consequences of climate change. In Italy, the number of extreme weather events has steadily risen over the past decade: in 2024, the *Osservatorio Città Clima* by Legambiente recorded 351 such events, compared to just 60 in 2015.¹ Public opinion research has shown that the personal experience of extreme weather can raise awareness and strengthen beliefs about climate change (Bergquist, Nilsson, and Schultz 2019), although the extent and nature of this impact vary depending on the type of event experienced (Soni and Mistur 2022).

In this context, media representations of extreme weather events become crucial in shaping public attitudes toward climate change. Media coverage not only increases the visibility of these events but also helps construct their meaning through specific interpretive frames (McComas and Shanahan 1999; Schafer and Schlichting 2014). For instance, they can influence the perception of extreme weather events as consequences of climate change or isolated incidents. Also, attributing such events to climate change is a necessary condition for public engagement in climate actions (Ogunbode et al. 2019). Nevertheless, the literature has only rarely examined how extreme weather events are framed in the media, and especially how causal attribution is constructed (among the exceptions, see Osaka et al. 2020; Painter et al. 2020), especially in the European context.

This study contributes to the research on the media representation of natural disasters and climate change, by focusing on television coverage – a medium that has remained underexplored in studies of such phenomena. Our research focuses on the 2023 flood in the Italian region of Emilia-Romagna, which significantly affected the local territory and population and received considerable attention in public debate (Azzalini and Marchese 2024). We analyze how the flood was covered by Italian prime-time TV news, by paying particular attention to the frames used to discuss climate change and the causes of the disaster.

Drawing on a mixed-method content analysis informed by framing theory of news broadcasts from Italy's main television channels, the study first examines the extent to which climate change was present as a relevant dimension of coverage of the Emilia-Romagna flood. Second, it analyzes whether and to what extent the causes of the flood were addressed and how they were framed, identifying the most frequent explanations reported in the television coverage. Third, it investigates the visibility of different actors – namely, politicians and scientists – and how they were associated with climate change and attribution frames. Fourth, it explores whether and how obstructionist frames emerged in the televised narratives of the flood.

Background

Extreme weather events and the perceived distance from climate change

Public attitudes toward climate change are shaped by a wide array of cognitive, social, and cultural factors that interact in complex ways (see, among others, Van der Linden 2017). Among cognitive variables, one of the most influential is psychological distance. Individuals often perceive climate change as affecting distant

places or future generations, rather than impacting their own daily lives. This perceived remoteness – temporal, spatial, and social – tends to diminish both concern and engagement, as well as support for climate policies (Biancalana and Ladini 2024; Singh et al. 2017; Spence, Poortinga, and Pidgeon 2012; Tvinneim et al. 2020).

The difficulty in perceiving climate change as an immediate threat stems from its global scale, gradual progression, and the invisibility of its long-term effects. A way in which people may experience the effects of climate change is through extreme weather events. Floods, heatwaves, droughts, and other disasters offer concrete and emotionally charged experiences that can heighten climate concern. Several studies have found that direct exposure to such events increases the perception of vulnerability and strengthens belief in climate change (Konisky, Hughes, and Kaylor 2016). What matters is not just the experience itself, but how it is interpreted and to what it is attributed.

As extreme weather events become increasingly frequent, public exposure to their consequences likewise grows. However, while many individuals may never directly experience such events in their lifetime, they are highly likely to encounter them through media coverage. In such a context, media coverage plays a key role in shaping both the visibility and the interpretation of such events in particular, and of climate change more generally (McComas and Shanahan 1999; Schafer and Schlichting 2014). In this regard, Ogunbode et al. (2019) have shown that individuals affected by the 2013/2014 UK floods were more likely to support climate mitigation policies only if they believed the floods were caused by climate change.

Empirical research has shown that greater media attention to climate change correlates with increased public concern and greater perceived legitimacy of the issue (Brulle, Carmichael, and Jenkins 2012; Carmichael and Brulle 2017). However, the salience of climate change in media discourse is highly variable across time and national contexts (Schmidt, Ivanova, and Schafer 2013). This variation depends on both internal and external factors. The former include newsroom routines and the structure of national media systems, while the latter include the political context and the occurrence of major events (Boydston 2013). We know that environmental issues tend to gain visibility at specific moments – for instance, the publication of major scientific reports, international climate summits, or the occurrence of natural disasters (Carmichael and Brulle 2017; Corfee-Morlot, Maslin, and Burgess 2007; Mazur and Lee 1993; Ungar 1992) – but this visibility is often short-lived. In accordance with the theory of issue-attention cycles (Downs 1972), environmental topics tend to be quickly displaced by more dramatic developments such as wars or economic crises (Djerf-Pierre 2012).

Media representation of extreme weather events

As framing theory argues, the media present situations and events from specific interpretive perspectives, thereby influencing how individuals understand them (Entman 1993). Framing involves the selection and salience of certain aspects of reality, promoting particular problem definitions, causal interpretations, and evaluations (Entman 1993). While the concept has been used in different ways depending on the context and field of study, in this article we focus on frame content, understood as ‘patterns of meaning articulated through journalistic content’ (Guenther et al. 2024, 373).

From this perspective, media coverage does not simply report events but actively structures their meaning, shaping whether they are interpreted as isolated occurrences or as manifestations of broader systemic processes. In the context of climate change, framing is especially relevant to the attribution of responsibility, the salience of causal explanations, and the identification of actors as legitimate interpreters of events.

Accordingly, media coverage of extreme weather events may not only amplify their visibility but also construct their meaning through frames that connect them to (or disconnect them from) climate change. Framing research has shown that media narratives can emphasize or obscure causal responsibility, scientific consensus, and the urgency of action, thereby shaping public understanding and engagement. When a causal link between extreme weather events and climate change is made explicit, it may reduce perceived psychological distance and foster support for climate policies. However, the framing of extreme weather events remains relatively underexplored, and existing findings are fragmentary and inconclusive.

Regarding references to climate change in the media representations of floods, Gavin, Leonard-Milsom, and Montgomery (2011) analyzed UK press coverage of floods between 2001 and 2007 and found that climate change was rarely mentioned. The same applies to Canadian media coverage of two flood disasters that occurred in the country in 2013 (Thistlethwaite et al. 2019). In contrast, an analysis of Australian newspaper coverage of the Brisbane flood in 2011 showed frequent references to climate change in journalistic discourse (Bohensky and Leitch 2014). In their analysis of Indian media coverage of the 2015 Chennai floods and the Andhra Pradesh heatwave, Painter et al. (2020) found that journalists frequently discussed the possible connection between these events and climate change, though usually in broad and non-specific terms.

Substantial variability in references to climate change in media coverage was also found in the reporting and discussion of other types of extreme weather events. For instance, Davidson, Fisher, and Blue (2019) showed that newspaper coverage of forest fires in the Province of Alberta (Canada) tended to avoid linking such events to climate change. In contrast, Osaka et al. (2020) observed that, in U.S. newspapers, the link between the 2011–2017 California drought and climate change was widely discussed, although the level of coverage varied across outlets.

There is therefore limited understanding of how, when, and by whom attribution is framed in media coverage. Attribution is rarely addressed, and the limited empirical evidence in the existing literature yields conflicting results. On the one hand, Thistlethwaite et al. (2019) show that when climate change was mentioned in newspaper articles in Canada, it was generally considered as the cause of floods there. In contrast, in the case of the Brisbane flood in 2011, Bohensky and Leitch (2014) found that the number of articles mentioning climate change as a cause was similar to the number denying the suggestion. Sometimes, the media have emphasized the heterogeneity of scientific conclusions regarding the role of extreme weather events, thereby framing such events in terms of uncertainty or disagreement (see Osaka et al. 2020 on the attribution of the 2011–2017 California drought).

Moreover, media narratives surrounding extreme weather events may differ according to a range of contextual factors, including the degree of conflict between local and national governments and the region's position within the country's centre-periphery structure. For example, comparing Italian newspaper coverage of the floods that struck

the Marche region in 2022 and Emilia-Romagna in 2023, Imperatore and Frazzetta (2023) found that the latter generated a more intense public debate. The Emilia-Romagna case involved greater political tension between the regional government, led by a centre-left coalition, and the national government, led by a centre-right coalition, as well as the region's stronger economic importance within Italy. Overall, existing research suggests that climate change is often only weakly incorporated into media coverage of extreme weather events as a causal explanation, and is frequently framed in terms of uncertainty or political contestation. However, systematic evidence on how attribution is constructed, and on which actors shape these frames, remains limited, particularly in the European context.

Politicization, obstructionist narratives, and the framing of climate change in the media

As public debate over climate change has grown and become increasingly polarized, the strategies and arguments used to downplay the issue or discourage action have also evolved (McKie 2019; Norgaard 2011). Early forms of climate scepticism were often characterized by outright denial of climate change, rejection of its anthropogenic causes, or scepticism toward its impacts (Dunlap and Brulle 2020; Farrell et al., 2019). In some cases, they also involved personal attacks on climate scientists (Oreskes and Conway 2011). Over time, however, explicit rejection of climate science has become less common. More recent scholarship instead refers to 'climate obstruction' or the 'obstruction of climate action' (Ekberg et al. 2022), highlighting subtler rhetorical strategies aimed at delaying, deflecting, or depoliticizing the need for meaningful action. These obstructionist frames can be understood as part of the broader landscape of climate misinformation, insofar as they introduce misleading, reductive, or distorted narratives into public debate, thereby undermining public understanding of the climate crisis and the range of possible responses to it.

Lamb et al. (2020) identify and systematize a range of discourses of climate delay which, while not explicitly denying climate change, nonetheless serve to undermine or postpone meaningful action. These strategies include shifting responsibility onto others (for example, individuals or foreign countries), stressing the economic or social costs of mitigation measures, promoting inadequate or purely symbolic solutions, and portraying systemic change as either unnecessary or unfeasible. Although such narratives are often framed as reasonable or pragmatic, they ultimately weaken political resolve and delay the implementation of effective climate policies.

Importantly, obstructionist narratives do not arise in isolation. They both shape and are shaped by the broader politicization of – and, increasingly, the polarization of opinions concerning – climate change. Conflicting political positions can contribute to fluctuations in media attention and levels of public concern (Anderson 2019). At the same time, journalistic norms of balance may lead the media to understate the scientific consensus or give disproportionate visibility to sceptical perspectives (Boykoff and Boykoff 2004; Gibson et al. 2016).

Research conducted in the United States has shown that the growing polarization of climate change is accompanied by an increasing prominence of political actors in media debates, alongside a declining presence of scientific voices (Chinn, Hart, and

Soroka 2020). Examining who speaks about extreme weather events – and how they do so – helps to explain how competing frames emerge and circulate within the media. Further studies have investigated the relative prominence of different actors in media coverage of extreme weather events. Overall, scientists appear far more frequently than politicians in articles that discuss climate change attribution, that is, those linking extreme weather events to climate change (Osaka et al. 2020; Painter et al. 2020). Similarly, research on media coverage of the 2021 Texas blackouts during Winter Storm Uri found that, within mainstream news outlets, climate scientists were significantly more likely than other actors to raise the issue of climate change during the power crisis (Hopke 2025).

Research questions

Starting from this background and adopting a framing perspective, this article analyzes the media representation of extreme weather events in Italian television, focusing on how the Emilia-Romagna flood in May 2023 was portrayed in prime-time news programmes on major national channels. Television remains the most influential medium in Italy (AGCOM 2024), and large segments of the population are therefore likely to have been exposed to its coverage of the flood. This makes it particularly relevant to examine how events are framed in television news. In this respect, compared to newspapers, television news is characterized by a higher degree of dramatization in reporting natural disasters (Inglis 2008; Miles and Morse 2007), which may further shape the interpretation of such events.

The following research questions guide our study:

RQ1: To what extent was the issue of climate change salient in television news coverage of the Emilia-Romagna flood?

RQ2: To what extent were the causes of the flood included in the television news coverage, and which causal frames emerged as most prevalent?

RQ3: Which types of actors appeared in the coverage, and how did they contribute to shaping climate change and attribution frames?

RQ4: If present, which frames of climate obstruction emerged in the coverage of the Emilia-Romagna flood?

Case study

The 2023 Emilia-Romagna flood

In May 2023, the Italian region of Emilia-Romagna – particularly the provinces of Bologna, Ravenna, Forlì-Cesena, and Rimini – was hit by three separate episodes of heavy rainfall (on 2, 10 and 16 May), resulting in severe flooding. The disaster caused 16 deaths, displaced thousands of people, and led to an estimated €9 billion in damage.

Because different types of extreme weather events can be attributed to climate change to varying degrees, establishing a causal link between climate change and a flood is generally more difficult than for events such as hurricanes, tornadoes, or glacier collapses. As the Intergovernmental Panel on Climate Change (2022) emphasizes, climate change is very likely contributing to the increasing frequency and intensity of extreme weather events, including floods. At the same time, however, any individual flood may result from a combination of factors, including local land management and previous adaptation measures. This complexity contributes to a lack of public consensus regarding the causes of flooding events. In the Italian case, data from the ResPOnSE COVID-19 project (Vezzoni et al. 2024) show that while more than 80% of respondents attributed glacier collapses to climate change, fewer than 20% believed that the Emilia-Romagna floods were mainly or entirely caused by climate change. Given these particular characteristics of flooding as an extreme weather event, its potential for politicization is especially high.

Moreover, as previous research has shown (Imperatore and Frazzetta 2023), the media debate surrounding the Emilia-Romagna floods was particularly intense, owing both to the region's economic importance and to the tensions between the regional and national governments. Compared with other flooding events, obstructionist frames were far more prominent in coverage of the Emilia-Romagna case. This makes the media representation of the floods especially worthy of investigation.

The Italian context: media representation of climate change and extreme weather events

Overall, the politicization of climate change in Italy has been described as partial, marked by growing salience and emerging signs of polarization across different spheres of public debate (Biancalana, Ladini, and Visconti 2023). Media attention to the issue remains sporadic and fragmented (Azzalini and Marchese (2023), 2024), and is considerably lower than in many other European countries (Biancalana and Ladini, 2024). One study examining the representation of climate change in Italian television news found no clear trend in the volume of coverage between 2020 and 2023 (Legnante et al. 2023). More broadly, climate and environmental issues tend to recede from media attention when other crises dominate the public agenda (Biancalana and Loreti, 2024). Earlier research also identified several recurring features of climate communication in Italy, including a tendency to emphasize the consequences rather than the causes of climate change, as well as a preference for dramatized and 'spectacularized' narratives (Biancalana and Ladini 2022; Candela 2015; Inglis 2008; Pasquare Mariotto and Oppizzi 2012).

Research on extreme weather events likewise suggests that Italian media often struggle to establish a clear connection between such events and climate change. For instance, a report by the Osservatorio di Pavia and Greenpeace (Azzalini and Marchese (2023)), based on all prime-time television news broadcasts aired in July and August 2022 – then the hottest summer on record – found that only 24% of the 522 news reports on extreme weather explicitly referred to climate change. Even when the issue was mentioned, references were often superficial or confined to brief remarks in the news anchor's introduction.

The following year's report (Azzalini and Marchese 2024), covering 2023 – the year of the Emilia-Romagna floods examined in this study – presents an even more striking picture. Climate change was mentioned in connection with the floods in only around 6% of news reports, an exceptionally low figure, particularly when compared with coverage of the 2022 heatwave. The report also found that the dominant interpretive frame used to narrate the floods was that of '*cronaca*': a term that has no direct equivalent in English but which refers to a style of reporting often conveyed through emotionally charged and sensationalist language, dramatic editing, and catastrophic imagery.

Building on this body of research, our study aims to provide original evidence on the television representation of the 2023 Emilia-Romagna floods and to reflect on its implications for public attitudes toward climate change.

Methods

Data

To answer the research questions, we analyzed prime-time news bulletins broadcast on seven major Italian television channels: Rai1, Rai2, Rai3, Rete4, Canale5, Italia1, and La7. The original dataset, provided by the Osservatorio di Pavia, includes all television reports aired throughout 2023 from 1 January to 31 December. In the dataset, the unit of analysis is the television report, with several attributes such as the date and the television channel. Moreover, in the original dataset every television report is associated with a primary and secondary topic – such as 'Environment and Nature' and 'Economy' – and a more extended summary of the content (for instance, 'Severe weather emergency and flooding in Emilia-Romagna: a race against time to reinforce riverbanks against rising waters so as to prevent further flooding').² From the initial dataset of 49,127 reports broadcast in 2023, we selected a subset of 1,017 segments that specifically addressed the Emilia-Romagna flood. This subset was identified through a keyword search of the extended summaries including the terms *alluvione*, *alluvioni*, *maltempo*, *Emilia*, and *Romagna*. For each television report, both the transcript and the full video were available.

Measures

For the purposes of our analysis, each of the selected 1,017 news items was manually reviewed and coded based on a predefined set of variables (see Table 1). The items were coded by the five authors of this article. The news items were divided among the five coders, with approximately 200 items assigned to each. To assess inter-coder reliability, 10% of the items were independently coded by pairs of coders before the coding of the full dataset. A meeting involving all coders was subsequently held to address any discrepancies and clarify the coding criteria. After the coding process was completed, all ambiguous cases – that is, items for which at least one coder had expressed uncertainty, or items with discrepancies among the coders – were jointly reviewed and resolved in a final meeting with the full coding team.

Four variables were used to capture key dimensions of news coverage related to climate change and attribution. While these variables do not directly identify full interpretive frames, they operationalize core elements emphasized in framing research, such as issue salience, causal attribution, and the role of actors. In particular,

Table 1. Summary of the main coded variables.

Variable	Coded items	Description	Example
Climate change	27	The item mentions climate change (1)	<i>Flood in Emilia-Romagna. Rains that do not help with drought and destroy crops: all caused by climate change. (TG5, 03/05/2023)</i>
Causation	46	The item mentions causation elements (1)	<i>Interview with climate physicist Antonello Pasini (CNR) in the studio on the factors that contributed to the recent floods in Emilia-Romagna. Link between drought and floods. (TG1, 17/05/2023)</i>
Politicians	363	Intervention of a politician (1)	<i>Trento: At the Festival of Economics, Elly Schlein is open to the possibility of cooperation with the Government on the reconstruction in Emilia-Romagna, but calls for continued efforts to combat tax evasion, raising taxes on dividends and inheritance, and expresses concern about how NRRP funds are being invested. Gentiloni pushes for ratification of the ESM (TG3, 25/05/2023)</i>
Scientists	53	Intervention of a scientist (1)	<i>Interview with expert Giorgio Cesari (Italian Society of Environmental Geology) on the landslides and floods that occurred in Emilia-Romagna and on prevention and adaptation measures. (TG2, 17/05/2023)</i>

we consider the presence of climate change as an indicator of issue salience, the discussion of causes as a proxy for causal attribution framing, and the visibility of actors as a way to capture who contributes to the construction of these interpretive elements.

For each news item – the unit of analysis in this study – all variables were coded dichotomously: a value of 1 indicated the presence of the characteristic of interest, and 0 its absence. Examples of the coding criteria are reported in Table 1.

- (1) The variable *Climate change* indicates whether the news extended summary included any reference to climate change. In the news reports analysed, climate change could either be briefly mentioned or invoked in a generic way as a rhetorical backdrop, without further discussion, or it could be explicitly thematized and discussed in more detail.
- (2) The variable *Causation* measures whether the news item discussed the causes of the flood (coded 1) or not (coded 0). For all items initially coded as 1, we carried out an additional recoding process by reviewing both the transcripts and the video recordings of the news reports. In cases where no substantive discussion of causes was found upon closer examination, the *Causation* variable was recoded as 0. This procedure enabled us to analyze how specific causes were discussed and in what contexts. The relevant items were divided among the coders, who then completed the coding independently. Meetings held before and after the coding process were used to resolve uncertainties and ensure consistency in the application of the coding scheme. The causes identified were further classified into the following categories:
 - (a) *Climate change*: the report attributes the flood, wholly or partly, to the effects of climate change.
 - (b) *Fatality*: the report presents the event as an unavoidable or unpredictable natural phenomenon, thereby minimizing or excluding human responsibility.
 - (c) *Poor management*: the flood is attributed to shortcomings in prevention measures, infrastructure maintenance, or land management practices (e.g. urban sprawl, failure to clear riverbeds, inadequate planning).

- (d) *Ambiguous*: the report refers to possible causes in vague or generic terms, without clearly identifying either climate change or alternative explanations.
- (e) *Other causes*: explanations not included in the categories above.

The final two variables concern the presence of specific actors within the news item.

- (1) The variable *Politicians* indicates whether political actors appeared in the segment, including both national and local figures, regardless of whether they held public office.
- (2) The variable *Scientists* indicates whether scientific experts were present in the news item. This category includes specialists from relevant fields such as climate science, hydrology, environmental engineering, and urban planning. It excludes experts concerned exclusively with the consequences of the disaster, such as psychologists or economists.

Methods

To address our research questions, we adopt a mixed-methods approach combining quantitative content analysis with qualitative frame analysis. In line with recent scholarship, we focus on the content of media frames as expressed in news coverage, while also considering the role played by different actors in shaping these interpretive patterns (Guenther et al. 2024). The quantitative component examines the salience of key elements related to climate change and causal attribution in the news coverage, whereas the qualitative component investigates the interpretive frames through which climate change is represented.

More specifically, to address RQ1–RQ3, we conducted quantitative analyses measuring the prevalence of news reports that mentioned climate change, discussed the causes of the flood, and included different types of actors across the full set of television reports on the Emilia-Romagna floods. To complement this analysis, we carried out a focused qualitative investigation of the subset of news reports that explicitly referred to climate change as a cause of the flood (i.e. reports coded 1 on the variable *Climate change as cause*).

The qualitative component was designed as a frame analysis aimed at examining how climate change was represented in Italian television coverage of the floods and at identifying the presence of obstructionist frames. Concentrating on the subset of news items in which climate change was explicitly mentioned, the analysis explores the interpretive patterns activated in the coverage, with particular attention to forms of soft denial and obstructionist rhetoric (RQ4). It also seeks to identify the discursive strategies through which the importance and urgency of climate action are downplayed, contested, or reframed.

All 29 relevant news items were systematically reviewed and brought together in a dataset containing full transcripts together with a set of coded variables for each segment. An initial binary coding procedure ('presence/absence') was used to identify whether obstructionist frames were present. In cases where they were identified, further analytical coding was applied to specify the type of rhetoric employed.

The methodological approach combines theoretical deduction with empirical induction, in line with established practices in framing research (Entman 1993; Matthes and Kohring 2008). We adopt a framing perspective that understands frames as interpretive structures that define problems, assign causal responsibility, and suggest evaluations and possible courses of action (Entman 1993). Several obstructionist categories were defined in advance on the basis of the taxonomy proposed by Lamb et al. (2020), while others emerged inductively during the analysis in order to capture features specific to Italian media discourse and the post-flood context.

The analysis identified four main obstructionist frames, understood as recurring interpretive packages shaping problem definition, the attribution of responsibility, and the perceived relevance of climate change in flood coverage. The frame ‘Fatalism and helplessness’ depoliticizes the event by portraying it as beyond human control and thereby deflecting responsibility. ‘Minimizing climate change’ emphasizes alternative technical explanations in order to downplay broader systemic links. ‘Discrediting activists’ delegitimizes climate protest by focusing on activists’ behaviour rather than on the substance of their claims. Finally, ‘Environmentalism as extremism’ portrays environmental policies as irrational constraints on economic and social progress. In this sense, obstructionist frames do not simply omit climate change; they actively reinterpret its causes, responsibilities and implications.

This qualitative dimension is particularly important because public understanding of climate change depends not only on how often the issue is mentioned, but also on how it is constructed and represented in media narratives – that is, on the interpretive frames through which it is communicated (Ekberg et al. 2022; Lamb et al. 2020; Mann 2021).

Results

Quantitative analysis

Climate change in television coverage of the floods

Figure 1 shows the total number of prime-time news reports referencing the Emilia-Romagna flood in 2023. Coverage begins in early May, coinciding with the first phase of the emergency, and peaks between 17 and 21 May. A sustained flow of reports continues until early June, after which coverage becomes sporadic and focuses primarily on recovery and emergency management. This pattern confirms the existence of Downs (1972) issue-attention cycle, whereby public and media interest quickly declines after the peak of an emergency. Based on this dynamic, we restricted the analysis to the period between 3 May and 24 December 2023. This subset includes a total of 1,017 news items specifically addressing the flood.

Only 27 of the 1,017 news segments referring to the floods (2.7%) mentioned climate change (RQ1). Although a low figure was expected, given the predominance of event-driven coverage focused on damage, rescue operations, and personal testimonies, the result is nonetheless striking. From a framing perspective, it points to the very low salience of climate change within media coverage of the floods, confirming previous findings in the literature. Two possible explanations emerge. On the one hand, the limited visibility of climate change may reflect uncertainty surrounding the attribution of this specific flood event to global warming, leading journalists to adopt a more

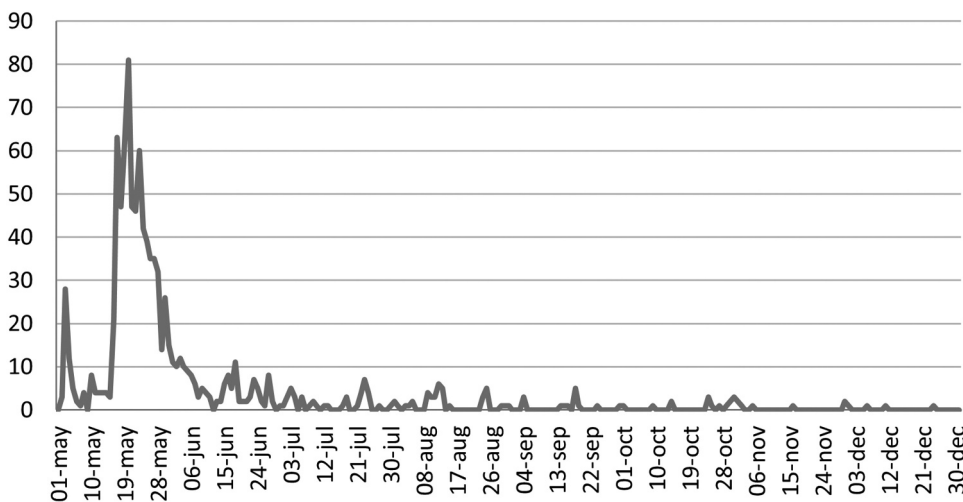


Figure 1. Daily number of television reports addressing the Emilia-Romagna floods (period: 1 May-31 December 2023). $N = 1,017$.

cautious approach. On the other hand, the coverage may have privileged emotional and dramatic storytelling over analytical or causal framing (Azzalini and Marchese 2024). More broadly, this finding is consistent with research showing that climate change does not always function as a salient interpretive frame in media coverage of extreme weather events (Guenther et al. 2024).

The temporal distribution of references to climate change reveals a clear concentration during the peak period of media attention: almost half of all mentions (16 out of 27) occurred between 17 and 20 May. This period coincided with a series of events that explicitly brought climate issues onto the agenda of public debate, including trade union demonstrations and statements by opposition parties – namely the Partito Democratico and the Movimento 5 Stelle – calling for stronger climate policies. A smaller number of references appeared in early May and in the months that followed, but these remained sporadic and isolated.

The framing of attribution in television coverage of the floods

Our second research question examines whether, and in what ways, the causes of the Emilia-Romagna floods were discussed in television news coverage. Overall, 46 news items mentioned at least one possible cause of the floods, a figure somewhat higher than the number of segments referring to climate change (27). Nevertheless, this still represents only a small proportion of the total coverage (4.5% of the 1,017 news items), suggesting that causal attribution – one of the central dimensions of framing – remained relatively limited.

Compared with references to climate change, discussion of the causes of the floods persisted for a slightly longer period. In particular, the period between 16 and 25 May shows a greater concentration of news segments addressing causation. Whereas the opportunity to discuss the causes of the floods extended over roughly ten days, explicit references to climate change were concentrated within a much shorter four-day period.

Table 2 presents the overlap between references to climate change and discussions of the causes of the floods. Of the 46 news segments that mentioned causation, only 20 also referred to climate change. Conversely, 26 news items discussed the causes of the floods without mentioning climate change at all. In a further 7 cases, climate change was mentioned without being explicitly linked to the causes of the floods. Together, these findings point to a clear disconnect between causal attribution and climate discourse in television coverage. Even in the context of an extreme weather event, news reporting rarely engaged in explicit discussions of causation, and even less frequently connected the event to climate change. From a framing perspective, this suggests that climate change remained only weakly established as a causal frame and largely detached from broader processes of responsibility attribution in the media narrative surrounding the floods.

Table 3 presents the distribution of references to the causes of the Emilia-Romagna floods across the main Italian television news channels. Since a single news item could mention more than one cause, categories are not mutually exclusive. Among the explanations identified, poor management appears slightly more frequently than climate change, with 35 and 29 occurrences respectively. The remaining categories are mentioned far less often: ambiguous explanations appear 7 times, fatalistic interpretations 6 times, and other causes 4 times. Overall, media discourse surrounding the attribution of the floods was not dominated by climate change, even though more than half of the news items that discussed causation identified climate change as at least one contributing factor.

Presence of political and scientific actors in flood coverage

RQ3 examines the presence of political figures and scientists in television coverage of the Emilia-Romagna floods. The results reveal a striking imbalance: out of the 1,017 news items analyzed, political actors – whether holding public office or not – appeared in 363 reports (36%), whereas scientists were featured in only 53 (5%).

Table 4 presents the percentage presence of political and scientific actors across four categories of news segments, classified according to whether they discussed the causes of the floods and/or climate change. The findings show that political figures were more frequently present in segments discussing the causes of the floods without mentioning climate change (46%) than in those explicitly linking the floods to climate change (35%).

Table 2. Distribution of television reports addressing the 2023 Emilia-Romagna floods by reference to climate change (mentioned/not mentioned) and flood causes (mentioned/not mentioned).

	Climate change – not mentioned	Climate change – mentioned	Total
<i>Causes – not mentioned</i>	964	7	971
<i>Causes – mentioned</i>	26	20	46
<i>Total</i>	990	27	1017

Table 3. Distribution of television reports by attribution of the 2023 Emilia-Romagna floods ($n = 46$, news items mentioning the causes).

Attribution	Climate change	Fatality	Poor management	Ambiguous	Other causes
N	29	6	35	7	4

Note: News items may include more than one cause.

Table 4. Percentage of television reports mentioning politicians and scientists among news items classified by the combination of mentions of climate change (yes/no) and causes (yes/no).

	% Tv reports mentioning politicians among ...	% Tv reports mentioning scientists among ...
Tv reports: CC not mentioned - Causes not mentioned (<i>n</i> = 964)	35	3
Tv reports: CC mentioned - Causes not mentioned (<i>n</i> = 7)	86	0
Tv reports: CC not mentioned - Causes mentioned (<i>n</i> = 26)	46	42
Tv reports: CC mentioned - Causes mentioned (<i>n</i> = 20)	35	45
Total Tv reports	36 (<i>n</i> = 336)	5 (<i>n</i> = 53)

By contrast, scientists were especially prominent in segments that addressed both causation and climate change together. Although scientists appeared in only around 5% of all television reports on the Emilia-Romagna floods, their presence rose to 45% among reports that discussed both the causes of the floods and climate change. Their relative presence was similarly high in reports discussing causation without referring to climate change (42%).

Overall, the findings point to a partial division of discursive roles. Politicians tended to dominate coverage of the floods more generally, while scientists were primarily called upon when climate change was framed as a causal factor. This pattern may reflect the fact that climate change, unlike other explanations for the floods, has not yet become fully politicized in Italian television news. Rather than being framed mainly in terms of political responsibility or partisan conflict, it continues to be treated largely as a matter of scientific expertise.

Qualitative analysis: obstructionist rhetoric in climate-related coverage

To complement the quantitative findings – which revealed only limited discussion of causal explanations and even fewer references to climate change – we conducted a qualitative analysis of the 29 news reports that explicitly discussed the causes of the Emilia-Romagna floods while also including either a direct or indirect reference to climate change.

The aim of this analysis was to examine how climate change was represented in the coverage and to identify the presence of denialist or obstructionist rhetoric (Ekberg et al. 2022; Lamb et al. 2020; Mann 2021). Drawing on a framing perspective, the analysis identified four main obstructionist frames – ‘Fatalism and helplessness’, ‘Minimizing climate change’, ‘Discrediting activists’, and ‘Environmentalism as extremism’. These can be understood as recurring interpretive packages that shape problem definition, the attribution of responsibility, and perceptions of the urgency of climate action. Although these frames operate through different discursive strategies, they share the common effect of downplaying, deflecting, or depoliticizing the climate issue.

The fatalistic frame and human powerlessness

Expressions such as ‘nature does what it wants’ (TG4, 3 May) or ‘this time the disaster struck the parts of Italy that actually work’ (TG4, 17 May) convey a fatalistic

interpretation of the floods, presenting the catastrophe as the outcome of uncontrollable and inevitable natural forces. Within this narrative, responsibility is implicitly transferred to ‘Mother Nature,’ fostering feelings of helplessness and resignation. References to an ‘inevitable calamity’ contribute to the construction of a depoliticized interpretive framework in which anthropogenic factors – such as climate change or failures in land management – are pushed into the background. This form of framing effectively absolves political and institutional actors of responsibility and discourages interpretation of the event as part of a broader systemic process, reinforcing the idea that human beings can do little more than submit to the forces of nature.

The prominence of this frame is particularly significant because it reflects a well-documented psychological mechanism. Previous research has shown that some individuals engage in little or no climate-related action because they believe that a ‘deity’ or ‘Mother Nature’ – understood as a higher power or secular form of providence – will ultimately control events or protect them from harm (Gifford 2011; Mortreux and Barnett 2009).

Even when not explicitly religious, this fatalistic worldview can affect perceptions of personal efficacy both directly and indirectly, reducing motivation to act and encouraging passivity. From a communicative perspective, the fatalistic frame corresponds to what Lamb et al. (2020) describe as the surrender argument: a form of rhetoric that neutralizes the possibility of change by portraying the problem as beyond human control and suggesting that action would ultimately be futile.

Denial of the centrality of climate change

Another obstructionist frame emerges through the minimization of climate change as a structural cause of extreme weather events. Some reports portray the floods as rare or exceptional occurrences (‘an event that will go down in history’, TG4, 17 May), while others emphasize the presence of multiple contributing factors (‘we must stop blaming climate change ... there are at least 18 contributing factors’, TG4, 19 May). This rhetorical strategy shifts attention toward local or technical explanations, which, although relevant in themselves, are selectively emphasized in ways that dilute broader systemic responsibility and reduce the perceived urgency of climate action.

This framing reflects a form of the scientific uncertainty narrative, in which the complexity of the phenomenon is used to generate doubt and confusion rather than foster understanding (Lamb et al. 2020). The overall effect is to weaken perceptions of scientific consensus and, consequently, to undermine the legitimacy of political action on climate change.

Delegitimization of activists

A small number of reports adopt a strongly delegitimizing stance toward climate activists. These narratives focus primarily on the methods of protest, often employing judgemental or paternalistic language: ‘they could have done something useful, put on boots and grabbed a shovel’ (TG4, 19 May); ‘the President of the Senate invites activists to help clear the mud’ (TG3, 19 May); ‘these young people are nothing more than petty-bourgeois narcissists’ (TG4, 21 May).

Within this framing, protest is portrayed not as a form of civic engagement, but as inappropriate, narcissistic, and socially disruptive. Attention is therefore shifted away

from the substance of activists' claims and redirected toward their behaviour and style of protest. This dynamic reflects what Michael E. Mann (2021) describes as mass distraction: a rhetorical strategy that diverts attention away from the need for collective action – such as regulating emissions or phasing out fossil fuel subsidies – and toward conflict, stigmatization, and social division. In this way, the frame creates a symbolic divide between those who merely 'protest' and those who supposedly 'take real action,' thereby undermining the credibility of climate activists and weakening their influence within public debate.

Environmentalism as irrational ideology

In several reports, environmentalism is portrayed as an extreme and dogmatic ideology, disconnected from common sense, technological progress, and economic development. Expressions such as 'fanatical and ideological environmentalism' (Studio Aperto, 25 May), 'environmental bureaucracy,' 'unrealistic environmentalism,' 'the politics of no' (TG3, 21 May), and 'eco-fundamentalists' (TG4, 19 May) contribute to a frame that delegitimizes environmental discourse and undermines its credibility. By constructing a polarized opposition between ideological environmentalists and pragmatic politicians, the debate is shifted away from scientific evidence and reframed as an ideological and value-based conflict, pitting environmental protection against economic growth.

Within this narrative, the ecological transition is presented not as a necessary response to climate change, but as an obstacle to progress. This frame clearly reflects the discursive strategies of delay identified by Lamb et al. (2020) and the obstructionist narratives discussed by Mann (2021), both of which seek to slow climate action by discrediting environmental voices and obscuring the structural dimensions of the climate crisis.

Discussion and conclusions

This study has examined how Italian television news covered the 2023 Emilia-Romagna floods, with particular attention to the salience of climate change, the attribution of causality, the role of political and scientific actors, and the presence of obstructionist frames. In doing so, it contributes to the growing body of research on media coverage of extreme weather events and climate change, highlighting the central role of attribution in shaping public concern and engagement. When direct personal experience is absent or limited, media narratives become crucial in linking environmental disasters to broader systemic causes. Yet this connection remains fragile, particularly in media systems such as the Italian one, where coverage tends to be episodic and driven by emotional storytelling.

Three main findings emerge from the analysis. First, references to climate change were extremely limited. This suggests that the Emilia-Romagna floods were largely framed without reference to broader climate narratives, confirming previous research on the marginalization of environmental and climate issues in Italian news coverage. Second, explicit discussions of causality were generally rare. Only 46 news items addressed the causes of the floods in any way, and just 29 attributed the event to climate change. Among the explanations provided, local mismanagement was more prominent, while scientific discussion remained marginal. Third, the visibility of different actors revealed a marked imbalance: politicians appeared in

more than one-third of the news items, whereas scientists were featured in only 5% of them. Climate change was discussed primarily in reports that included scientific experts, suggesting that the issue continues to be framed mainly as a technical rather than a political matter. These findings are consistent with previous research showing that climate change is often only weakly integrated as a causal frame in media coverage, while event-based and impact-oriented narratives tend to dominate (Guenther et al. 2024).

The study also found that, even when climate change was mentioned, it was frequently filtered through obstructionist frames that reduced its interpretive and political significance. Narratives centred on fatalism, minimization, the delegitimization of activism, and ideological polarization all contributed to downplaying the urgency of climate action. These findings suggest that the weakness of climate narratives in television coverage is not only quantitative but also qualitative: climate change is not merely underrepresented, but often represented in distorted or depoliticized ways. At the same time, while this article focuses on explicit forms of climate obstructionism as framing strategies, framing theory also reminds us that meaning is produced through omission as well as inclusion (Entman 1993). Implicit forms of climate obstructionism may therefore emerge through the exclusion of climate change from media representations of extreme events, as occurred in the majority of the news items analyzed here.

This research contributes to our understanding of climate communication in several respects. Empirically, it provides new evidence on television coverage of climate change in Italy, a medium that remains highly influential within the Italian media landscape but has received relatively limited scholarly attention. Methodologically, it demonstrates the value of a mixed-methods approach capable of capturing both the quantitative salience of climate change and the framing strategies through which it is constructed. One limitation of the study is that the analysis did not distinguish systematically between different media outlets. This choice reflected the study's focus on broader framing patterns rather than on ideological polarization across editorial lines, an issue already explored in previous research (Imperatore and Frazzetta 2023).

Future research could further expand the qualitative analysis of media frames, particularly with regard to how proposed responses to climate change are articulated. In this respect, an important distinction should be drawn between adaptation and mitigation strategies. Further studies might also examine the degree of dramatization in the coverage of extreme weather events, a characteristic previously identified in Italian climate reporting (Candela 2015).

Finally, although the absence of climate change from much of the flood coverage is striking, its occasional presence also raises important questions. Simply mentioning climate change is not necessarily sufficient, nor is it always analytically desirable. As Lahsen and Ribot (2022) argue, climate-centred narratives can overshadow structural factors such as governance failures or social inequalities, thereby narrowing the range of possible policy responses. This form of climate reductionism (Hulme 2009), or climatization (Müller and Kruse 2021), may provide a politically convenient explanation that diverts attention away from more immediate and localized forms of responsibility. What is ultimately missing from much of the coverage, therefore, is not only the mention of climate change itself, but its integration into a broader and politically meaningful narrative linking causality, risk, and responsibility.

Notes

1. See: <https://www.legambiente.it/news-storie/clima/bilancio-2024-italia-sotto-scacco-della-crisi-climatica/>.
2. Authors' translation, the original text is as follows: 'Emergenza maltempo e alluvione in Emilia Romagna: corsa contro il tempo per rinforzare gli argini dei fiumi in piena per evitare possibili nuove inondazioni'.

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