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"They just won't listen"—The role of blame in narratives of past extreme weather events for anticipating future crisis

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Abstract

The phase before an extreme weather event is crucial for the actual reaction to the impacts of such an event. In this phase, professionals in the field of civil protection and emergency management anticipate the intensity and impact of the event and use these expectations for action. We argue that anticipation is—beyond others—shaped by the organizations' shared narratives of past crisis that resulted from extreme weather events. The findings focus on the frame of 'blame' in the narration and are based on two fields of study, road maintenance services and forest fire control. Qualitative group discussions and semistructured interviews show two very different views on blame depending on the organization: human factors and fate. This contrast can be traced back to the character of the weather events itself, but also with the self-image of the organization and perceived external expectations. Depending on the narrative plot and threshold of the event, narratives can affect and alter practices of anticipation through narrations of renewal. Findings contribute to the understanding of organizational sensemaking through narratives of blame and consequences.

KEYWORDS
anticipation, blame, forest fire control, narratives, road safety

1 | INTRODUCTION

'Up to $180 \, \text{L/m}^2$ rainfall expected'. This early warning 2 days in advance about a rainfall event that led to floods with devastating impacts in Western Germany, the Netherlands and Belgium in July 2021 shows the dilemma of warning quite clearly: even though information was available beforehand, anticipation of and preparatory action for the event were in part inadequate (Fekete & Sandholz, 2021). Meteorological forecasting for future weather events is crucial for anticipatory action of organizations involved in broader civil protection and emergency management (Kox et al., 2015), and its data accuracy is continuously improving (Hirschberg et al., 2011).

However, such advances in natural sciences only can have a positive impact on decision-making of professionals in the field of civil protection and emergency management, if this information is understood by them and implemented in their existing practices (Kox et al., 2018). Anticipation is informed by an array of aspects and not solely a rational decision. One contributing factor is the narration of past events as narrations are a practice of imagination that affects anticipatory actions (Anderson, 2010).

With a practice-based approach, we aim to shed some light on how organizational narratives inform anticipation for future weather events in two organizations concerned with upholding critical infrastructure and emergency management and show the importance

of collective sensemaking through shared narratives for the handling of threats and crisis. Using qualitative social research methods, this study examines the narratives of past events in two fields: forest fire control and road safety. Impacts of forest fire can be observed in ecological damage, economic losses, the release of greenhouse gases and pollutants, as well as risk to human health and life (Flannigan et al., 2009; Goldammer et al., 2009). Droughts and heatwaves are creating dry fuel for the fire that result in increased ignition speed, especially in combination with wind (Goldammer et al., 2009). Similarly, extreme weather events can have a significant impact on road traffic from obstructions in traffic flow to fatal accidents. In Germany, 8% of accidents with injuries of people are due to weather, be it weather conditions themselves, for instance, impaired sight due to fog or direct sunlight or poor road conditions, for example, slippery or icy roads (Statistisches Bundesamt, 2018). Both fields rely on weather information in their work practices to mitigate, prevent and/ or prepare for an upcoming weather event that could unhinge their field of responsibility.

We argue that narratives of past extreme weather events that generated a crisis in the organization are part of a sensemaking process and contribute to future action. Crises are understood here as a disruption of normality that contain uncertainty and have possible negative impacts. After a crisis and thereby following the preparation for the next extreme event that can generate a crisis, one particular attribute in the plot of narratives of past events is of special relevance: the frame of accountability or even blame. This is connected to sensemaking of the event, as 'through a narrative, persons, organizations, or agencies are held accountable' (Seeger & Sellnow, 2015, p. 49). The question of accountability is critical for future action. It matters how past crises are evaluated by the individual as well as the organization. In the case of weather events, it will become apparent in the following that *fate* and hence, an acquittal of accountability on the site of persons or organizations is also part of this sensemaking process.

In the following sections, we focus on the role of narratives in organizational sensemaking, and particularly observe blame in the narration of crisis in two fields presented above: forest fire control and road safety. After introducing the methods used and how data was obtained and analysed, narratives about past extreme weather events and their hazards are examined. Furthermore, the plots of narratives are analysed, following Boudes and Laroche's (2009) typology of plots for crisis management. Findings contribute to the understanding of organizational sensemaking, narratives of future crisis and thereby the anticipation for future crisis.

2 | LITERATURE REVIEW

The focus of our research lies on what oftentimes is termed the preparation phase in the risk management cycle in organizations with emergency service tasks (Felgentreff & Glade, 2008). More specifi- cally and in line with Calhoun's (2004) concept of 'emergency imaginaries', we aim to gain a deeper understanding how

organizational narratives of past weather events shape decision- making in the present through practices of anticipation and hence, imagining future(s).

The research on narratives within a social science perspective is manifold. They have been analysed as tools of persuasion (see e.g., Bilandzic & Busselle, 2013), as cognitive and embodied structures, and mental processes that help make sense of the surrounding world (e.g., Cunliffe & Coupland, 2012; Langellier & Peterson, 2006; Talmy, 2003), in the context of science communication (e.g., Davies et al., 2019) and learning (Glaser et al., 2009). In organizational research, stories and shared storytelling are seen as instruments of collective sensemaking (Boyce, 1995) and as tools to reproduce organizational structures (Linde, 2008). Many research papers however use the terms 'narrative' and 'stor' interchangeably (see Koenig Kellas, 2015, p. 256).

Boje (2002) in his book about narrative methods for organiza- tional and communication research starts with setting up a distinction between these two terms. In his definition, stories are a 'simple telling of chronology' (Boje, 2002, p. 1), the telling of an event, although this can be nonlinear. Narrative, in his understanding, comes after the story and adds 'plot' and 'coherence' to it. He goes on with proposing the concept of 'antenarrative' which are 'stories that are too unconstructed and fragmented to be captured by retrospective sensemaking' but which enable to capture the process of sensemak- ing. Czarniawska (2010) on the other hand follows a narratologists' distinction of narrative and story and offers a definition of narrative which includes plot and character (albeit the character does not necessarily need to be human). The research presented uses a combination of these definitions and analyses sequences of narration that contain plot, one or more (nonhuman) characters, and which are coherent in the story they tell.

Narration and storytelling are a deeply human feature and connected to decision-making. According to Fisher's narrative paradigm (Fisher, 1984), decisions are not solely based on an analytical, rational evaluation but a synthesis of the aforementioned and 'literary aesthetics'. Hence, narratives 'put forth arguments', but are also influenced by the storytellers own social and cultural embeddedness (Stache, 2017). This is especially interesting within a perspective of risk research as those two frameworks are particularly glaring. Risk assessment and the analysis of risk on the basis of data and statistics as a rational evaluation is an important tool in crisis prevention. However, research on the perception of risk shows that human decisions involve far more dimensions than what statistical analysis can depict (Bonß, 1995; Slovic, 2011).

In the context of this study, we can see weather information as the 'rational tool' for decision-making (disregarding for a moment the constructed nature of much of weather information by other actors— the weather forecasters, see for instance Fine, 2010), whereas the practices of anticipation that follow are not necessarily rational but a concoction of weather information, directives from the hierarchy and structure in the organization, personal dispositions and experiences of the decision-maker, organizational cultures, inter alia. To gain further knowledge into this interplay, narratives can help to dive

deeper into the relations of practices of anticipation and organizational culture and how futures are imagined through retelling and 'emplotting' the past. 'Emplotment' is seen as the 'grasping together of selected events, characters and actions into a plot line' (Boje, 2002, p. 114), and hence, the transformation of story into narrative.

To be able to look into this interplay of anticipatory action and narratives, we first have to take a look into the past. We hypothesize that the narration of past weather events, particularly when perceived as 'extreme' and as a crisis, influences the anticipation of future by actions in the present which are referring to the past. Because of the negative impact of crises, people as well as organizations tend to look for someone or something to blame to make sense of the event (Seeger & Sellnow, 2015; Weiner, 1986). Correspondingly, we see organizational narratives as anecdotes that are told in the organization and that are deeply connected to sensemaking. According to Boudes and Laroche (2009), narratives condense a complex crisis. This condensation reduces the scale of the event and the event gets ordered which consequently enables individuals but also groups to incorporate the event in their mental world. Narratives thus are tools to make us understand the past and draw conclusions for the future. For Weick et al. (2005) to make sense of an event, two questions ought to be raised: The first question 'What's the story here?' brings the event into existence. The second question 'Now what should I do?' allows to bring meaning into existence (Weick, et al., 2005, p. 410). Hence, a localization of the individual in the narrative, some sort of personal relation is imperative for meaning making and consequently sensemaking. To be able to get a fuller picture of how and what kind of narratives are used in the organizations in terms of emergency and crisis management, Boudes and Laroche's (2009) extended questions paraphrased here as 'Who or what is responsible?' and 'What are the consequences?' were used in this study. Additionally, the aforementioned questions concerning sensemaking are combined with a practice-based approach. To define practices, the characterization of Sole and Edmondson (2002, p. 18) is followed who describe practice as connected 'to doing and involves awareness and the application of both explicit and tacit elements' (Sole & Edmondson, 2002, p. 18). Explicit elements in that case would be language, tools, concepts or roles and tacit elements can be seen as rules of thumb, embodied capabilities and shared worldviews. Working with a similar terminology, but looking into practices of preparation, Baker (2014) introduces explicit and implicit preparedness practices. In that sense, explicit practices on the one hand are understood as 'traditional planning and preparedness actions' with a top-down approach. Implicit practices on the other hand are 'taken-for-granted activities and resources people use in everyday life with the potential to help people in response to disaster' (Baker, 2014, p. 1). As the anticipation of future entails uncertainty, Baker and Grant (2018) theorize that preparedness embodies narrative structures to reduce uncertainty and create a feeling of control over the situation.

To be able to detect how members of an organization assert responsibility in the aftermath of a crisis, Boudes and Laroche developed a typology of plots for crisis management (Figure 1). In the
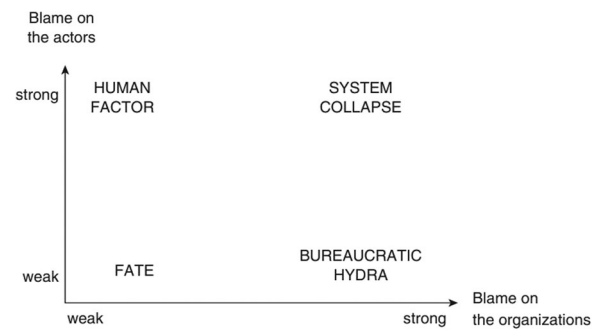
FIGURE 1 A typology of plots for the crisis (Boudes & Laroche, 2009, p. 388)

narrative plots of *system collapse* and *bureaucratic hydra*, crises are seen as badly controlled by organizations, but while the plot of *bureaucratic hydra* acknowledges that the organization's possibilities of managing complex crisis are limited and therefore individuals are only partly to blame, the *system collapse* plot blames both individual and organization for the crisis and assumes human selfishness as well as organizational weaknesses as root causes for the crisis. The opposite of this assumption is shown by the *fate* plot which concludes that humans and the organization did all they could but had no or little chance to mitigate the unfolding situation. The blame on individual actors however is presented in the *human factor* plot which holds individual human mistakes responsible for the crisis (Boudes & Laroche, 2009, p. 388).

As narratives are also frequently used in education (see e.g., Glaser et al., 2009) we argue that this typology is not only central to analyse who is blamed for crises and how successful the coping of the organization or individual is assessed, but that these plots also affect overarching organizational sensemaking, narratives of future crisis and thereby the anticipation future crisis.

3 | METHODS

This article's findings are based on two case studies: Firstly, German road maintenance and their relation to weather warnings and road safety, and secondly, forest fire control in the two north-eastern German states of Brandenburg and Mecklenburg Western Pomerania and their management of forest fire danger. To shed light on narratives of extreme weather events and their influence on the anticipation of and reaction to future events, qualitative social research methods were applied. Focus group discussions and semi-structured expert interviews with actors involved in forest fire management as well as road safety were carried out. Discussions and interviews in both fields took place separately.

The first case study emphasizes the field of forest fire control with a special focus on drought and includes relevant actors in fire brigades and forestry services. In the climatically more continental regions of eastern Germany, first and foremost in the federal state of Brandenburg, where sandy soils with low water storage capacity and

monocultures of pine trees are predominant, forest fires occur most frequently in Germany (Thonicke & Cramer, 2006; UBA, 2019). Brandenburg and the neighboring federal state of Mecklenburg Western Pomerania were chosen as a focal point of this study. These regions experienced exceptional and prolonged drought and heat, especially in the years 2018 and 2019 which resulted in an increase of forest fires. In addition, some of those forests were laden with munition because they are former or still actively used military areas or are areas of former combat operations. Hence, forest fires in these areas were difficult to control and, in some cases, even threatened adjacent settlements and led to evacuations, increased media and political attention to the issue of forest fire danger, particularly in combination with drought and other hazards (Deutscher Bundestag, 2019; Goldammer, 2019; Neisser & Kox, 2021). The field of road maintenance includes experts in the position of managers of road and highway maintenance services as well as officials of road and transport authorities who are responsible for road safety and the prevention of accidents and who are active users of a road weather information system called SWIS (*Straßenwetterinformationssystem*, road weather information system) by the German Weather Service (DWD). We see these institutions as crucial upholders of critical infrastructure, as one of their main tasks lies in the permanent maintenance and perpetuation of traffic flow as well as safeguarding roads and their users. There is high potential to reduce the number and impact of forest fires and as well as road accidents through anticipatory action based on early warnings like a forest fire danger rating or weather forecasts and weather warnings (Neisser & Kox, 2021).

For the focus group discussions, participants were randomly selected based on their specific work tasks and invited to take part in the discussions. For the field of forest fire control representatives of local fire brigade control centres, administrative fire agencies, fire associations and forestry services from Brandenburg and Mecklenburg Western Pomerania were invited to partake. In contrast, the field of road maintenance was observed in a broader geographical setting to be able to detect differences in weather events that impact road safety. Here, representatives from different organizational backgrounds (highway maintenance depots that since 2021 are subsumed under the Autobahn GmbH, a limited company owned by the federal government; road maintenance depots that are administratively linked to state departments of transportation, and the administrative units in the state departments), and contrasting topography, precipitation level, likelihood or experience of extreme weather events and their impacts (snow, heavy rainfall, storm, hail, landslides, flood), traffic volume and eventual borders to neighboring countries were chosen to serve as participants in the study.

With information obtained in the focus group discussions, the sampling of the experts for the semi-structured interviews followed the principle of sampling of maximal variation (Flick, 2011, p. 165). This resulted in five focus group discussions with 25 participants in total and 6 in-depth interviews. Focus group discussions and interviews took part from October 2020 until September 2021 and

were between 1 and 2 h long. Due to contact restrictions because of the COVID-19 pandemic, they were held online via a video conferencing tool or telephone. Topics discussed in the focus group discussions and interviews examined practices of preparation for and prevention of impacts of extreme weather events, usage of weather forecasts, and experiences of past extreme weather events, beyond others. This retelling of past events resulted in the narratives analysed in this paper if the stories told were structured with a plot and coherent. Simple recounting of events without narrative structures was not included in the analysis.

For the analysis, a multistage, iterative procedure of category formation and coding was applied (Kuckartz, 2018). The collected data was analysed following a structuring content analysis (Mayring, 2015) where a coding category system was established which was derived from the literature reviewed with a focus on individual and organizational narratives and attributes. In a second step, further inductive categories were developed from the material.

4 | RESULTS

To be considered a narrative for this analysis, the stories told by the participants had to contain plot and coherence (Czarniawska, 1998). Even though Boje (2002) proposes a wider form of narrative than it is used in this study (antenarrative which can be incoherent and/or unplottet), his definition of plot is still applicable and as following: Plot is 'the chaining of cause and effect or stimulus and response into a pattern, structure or network. Plot also relates to tracing the microhistory and textuality of relationships between obstacles to human intentions, antecedents, behaviour, contexts and outcomes in webs of other events' (Boje, 2002, p. 108). As the second dimension of narrative, coherence is a central element, or, as Weick (1995, p. 128) puts it: 'When people punctuate their own living into stories [sic], they impose a formal coherence on what is otherwise a flowing soup'. Last but not least, it has to contain one or more characters, albeit nonhumans are included (as we will see in the fate plot).

4.1 | Accountability and blame

Interestingly, we can see major differences between the two organizations in their narration of past events in terms of accountability and blame. On the one side, in the road sector *fate* and therefore the inability of human actors to mitigate the situation offers a high explanatory factor as to why certain crises unfold. Here, the 'indomitability' and uncontrollability of nature are emphasized and hence, a picture of disaster as natural and unavoidable, without the recognition of disasters as 'socioenvironmental and socio-technological processes' (Barrios, 2020, p. 23), is created. Narratives of the organizations in the forest fire sector on the other side, emphasize the human factor much more. In the following, those two plotlines are examined in more detail.

4.1.1 | The human factor plot

Less than 3% of forest fires in Germany have natural causes such as lightning strikes, and the rest is most likely caused by humans (BLE, 2020). A focus on the *human factor* in the narratives of the field of forest fire control as the culprit of forest fires is a consequence based on those statistics. Even though not all forest fires in Germany can be traced back to their root cause, for the ones where it is possible, the primary causes of fire ignition is identified as human related such as 'negligent behaviour' and 'intentional fire raising' (BLE, 2020). Educational work here represents an important adjusting screw for forest fire control, but it is noted by the interviewees that beyond a certain point not much can be done. 'The ones who do not want to, they just won't listen anyways' as a high-ranking member of a fire brigade association puts it, referring to the action and misbehaviours of the public, besides publicly available information about adequate behaviour during high forest fire danger. The responsibility for a forest fire is put on the individual, whose actions can have implications for public safety. It is emphasized that the knowledge of how to behave in a forest, especially during a period of high forest fire danger, that is, during a drought, is available and it is an active individual decision to act against this knowledge. Therefore, the crisis of forest fire is seen very much in light of human interference in or with nature and blame is attributed to specific individuals whose behaviour is seen as central to the unfolding events and follows the outline of fate in the typology of Boudes and Larouche (2009). Hence, narratives in the field of forest fire control are oftentimes stories of a crisis that could have been avoided and blame is put on unruly behaviour of others. These findings can be seen in line with Baker and Grant's research about disaster preparedness as social control where 'preparedness reflects values of personal responsibility and judgements connected to a need for compliance by members of the public' (Baker & Grant, 2018, p. 36). Even though in the narratives of forest fire control, preparedness is not expected from the public but the public is seen as tantamount for the fire brigade's preparedness activities, compliance and implementation of desired behaviour is also highlighted here.

In road management the human factor plot can be found only in the context of careless drivers causing accidents due to e.g. bad equipment such as summer tires or not adapted driving in winter or on wet roads. Another point in terms of the human factor are truck drivers who, due to external pressure, continue to drive despite difficult weather conditions as it is described by a representative of a regional road construction authority in the following account:

> Often it is trucks that stand somewhere across, prevent the continuation of following vehicles, because simply the tires are too bad. On the Autobahn we sometimes had the problem [...] that trucks drive with a bad set of tires. And today, with the high time pressure, with the delivery dates and so on, they drive until they can no longer, or until they get stuck somewhere. And if a truck gets stuck on the Autobahn because it has started to slide, we can't get it off the road that quickly. And these are the things that massively hinder us and lead to problems. If a truck is stuck on the road, no gritting vehicle can get past.

This quote highlights the externalization of liability on to a human factor, even though not necessarily on the truck drivers themselves but on the system that force them into riskier behaviour, and stresses situative practices. There are no explicit practices in place to handle the situation, 'no gritting vehicle can get past', and therefore, blame is attributed to external factors outside of the own realm of agency.

4.1.2 | The *fate* plot

The more prevailing frame in the road traffic sector is what is called *fate* in Boudes and Laroche's (2009) typology. Within this plot of the narrative, human actors or the organizations are not to blame or at least are not hold accountable for the crisis by the narrator. They 'did all they were able to' (Boudes & Laroche, 2009, p. 388). In the interviews and focus group discussions, many weather events are described as events that leave no room for preparation and can only be managed in response. This is especially prevailing for storm and heavy rainfall events. Despite existing emergency plans, it is emphasized that it is not possible to plan for every eventuality and that individual responses are necessary. Blame is placed on weather events and their rarity which is used as an explanation for not having plans in action rather than criticizing too few or poor resources, as it can be seen in the retelling of a storm event by a representative of regional authorities for road construction and transport:

> But that was an experience for me, because I was not directly in the vicinity, but had an appointment there immediately a week later and then in principle drove from [anonymised] along the Danish border to the North Sea and was amazed at the power, the force of this storm, that it had uprooted trees that had a diameter unparalleled. All this in rows, along the road. Or even flattened an entire clearing. That was, yes, very sobering for me, where you then think: 'Okay, we have no influence on the weather. This is very extreme.'

Unlike in the forest fire sector, where human factors are blamed and thus, the unpredictability of human action is strongly highlighted, the road management sector emphasizes the uncertainty of space, time and factuality of weather events. An appeal to road users to rather stay at home, not to drive, to inform themselves, or to drive slower, just to give a few examples, is not raised.
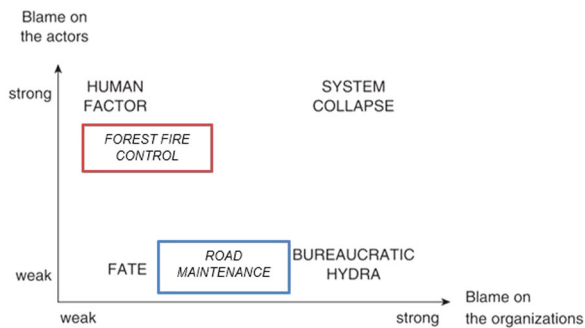
FIGURE 2 Plots of blame in forest fire control and road maintenance.

4.2 | Consequences

To summarize, among the participating organizations of forest fire control and road maintenance, two almost opposing plots in the narration of past events exist concerning blame (Figure 2). To be able to understand how these differing plots influence practices of anticipation, a closer look onto the described consequences of the events in the narration is taken. One assumption after hearing the narratives and their plotlines for instance could be that the crisis being a crisis due to human factors is seen as more controllable and hence, preventable. However, this cannot be said for the fire departments who took part in the focus group discussions. This ambiguity can be traced back to the prevailing culture in the organization. Expectations of fire departments and their raison d'être is to extinguish fires. This is considered their main task, especially by outsiders. Therefore, it is often deemed 'normal' by political authorities that there is a fire and that the fire department will extinguish it. Needless to say, this only goes so far as that only forest and no other valuables are affected and the fire can be extinguished quickly. The burden is put on firefighters 'to somehow get it done out there' instead of prevention (representative of local authority in fire and disaster protection); however, because of heavy forest fires in the years 2018 and 2019, which also involved forest areas that were contaminated by ammunition, political attention and interest rose which resulted in new and better equipment for forest fire units and new regulations. Hence, the narrative shifts from blame onto a narrative of postcrisis renewal. The latter is a view into the future, with the objective to be better prepared and equipped for the next crisis (Seeger & Sellnow, 2015). A narrative of renewal is 'built on the inherent need to change created by a crisis, which demonstrated the inadequacy of current systems and structures' (Seeger & Sellnow, 2015, p. 88). After the forest fires in 2018 and 2019, it became apparent that the current state of affairs was not sufficient to cope with the magnitude of forest fires in this area. New and more suitable equipment for the fire departments, particularly for ammunition-ridden areas, derived from this crisis and hence, the crisis created change.

As for the interviewees of the road management organizations, it is difficult to subsume all their narratives into a meta perspective of consequences. Each interviewee was talking about a different weather event. Narratives for instance about winter storms, summer storms or flooding were portrayed which all have different impacts on road maintenance practices. However, what is interesting here is the emphasis on personal experience and therefore, an endorsement of situative practices. This 'action blending' (Baker, 2014, p. 1) of implicit and explicit practices is broadening the possibilities that only acting according to explicit practices would allow and gives room to adapt to the current situation. Although for certain events, consequences in the form of changing explicit practices were taken, this cannot be said for all narratives. Nevertheless, one narrative stood out where a shift in the plot of blame could be observed. Contrary to the narrative of forest fires in 2018/2019, this narrative in the road sector about a winter event in 2006 underwent a different transformation. A particularly strong and long winter in Northern Germany resulted in shortages of stock and supply of road salt. This mishap was discussed politically and it got decided that – because of the rarity of the event—it was not worth taking further anticipatory action in terms of scaling up resources as it was not expected to happen again in the near future. The next year the salt supply was scarce again and the administration had to give in and finally extend the federal state's storage units for road salt. In the beginning of this narrative, nature, or *fate* and its unexpectedness is highlighted. Nonetheless, after a similar event shortly after, blame shifts towards the organization and onto the *bureaucratic hydra* plotline.

Concerning the organizational narratives of past events and resulting imaginaries of the future, it seems that events have to reach a certain threshold in terms of their impacts to produce future consequences, especially when political decision-makers or decision-makers higher up in the organizational hierarchy have to be involved, for instances with providing resources and monetary funds. Nonaction on their side therefore produce a shift in sensemaking for the people on the ground who actually are tasked with safeguarding the public, be it on the road or in forest fire control.

5 | DISCUSSION

Narratives of personal or organizational experiences of extreme weather events have the power to alter organizational anticipatory action, especially after a high impact event, as we have seen in the narratives described above. Furthermore, experience of crisis of an individual but also an organization, wrapped in a coherent narrative, can teach others that did not share this experience something about the event (Seeger & Sellnow, 2015, p. 51). However, for practices to change or adapt on an organizational level towards the imagined future produced in the narratives, it is relevant of who or what is deemed accountable in the plot of the narrative and therefore, a retrospective view is applied. Nevertheless, it is important here to point out the fluidity and intertextuality of narratives. The narration of one singular narrator can change over time as it could be partly observed in the example of the winter event 2006. With new information and sensations that are added to the chronology of

events, sense has to be (re-)created and the narrative is continuously 'emplotted'. Meaning the 'chains of relationship among events and characters' (Boje, 2002, p. 121) is not a straight line but can be imagined as a circle or spiralling chains.

5.1 | Narratives for change

When looking at the human factor plot outlined in the narratives in forest fire management, a connection to the fate plot can be observed. In this particular plotline, not people inside the organization but people externally are made responsible for the crises. In the narratives, there is no option for change available as change is externalized and hence, opportunities for action are reduced. Likewise, in the narratives that follow the fate plotline, change is not created until the event evolves into something that cannot be left unaddressed. This is mainly the case when pressure rises from outside the organization. For both organizations studied, it is an *either/or*. *Either* nature is the culprit of the crisis *or* it is human interference with nature. Rarely is a crisis caused by extreme weather seen as what is promoted by a social science perspective: the relations that link society, environment and culture (Oliver-Smith, 2019) and an event in which the reference frame and hence, sense, is disrupted or lost (Macamo & Neubert, 2015). This shift in perspective, away from a singular culprit and towards an understanding of social, cultural and environmental entanglement, could lead to better anticipatory action. When blame is placed on an external source, agency becomes limited, as we have seen in the narrative about people being responsible for forest fires and the fire fighter's perception of the futility of action.

On the contrary, when blame is placed on the organization itself, the outlook for the future shifts, as observed in the narrative of the winter event 2006. Here, agency is reclaimed as options for change arise. The inaction of the organization is seen as the determining factor for crisis and action becomes a possibility. Crises have the potential to induce change in the organization, to adjust structures and create opportunities for learning and growth (Seeger & Sellnow, 2015; Seeger et al., 2005). Ulmer et al. (2010) demonstrate that organizational learning from a crisis can be more beneficial for an organization than attributing blame or neglecting responsibility. With a centring of the organization and its members in the narrative, agency can be created and existing practices adjusted and adapted. This is not to say that members of the organization have to take the heat in a crisis – but a focussing on external factors might limit their possibilities of learning. Following Weick, et al. (2005), a localization of the individual in the narrative allows to bring meaning into existence which can be translated onto an organizational level. Nonetheless, when cons idering dimensions of organizational structuring, hierarchy and power, and justification of the organization's raison d'être (e.g., because resources stem from tax money), there is a perceived high pressure from outside to behave in a way what would be regarded as 'correct'. This could be a contributing factor in why the existing narratives of blame in the two organizations observed externalize blame: the externalization of blame reduces points of attack. Fire brigades as well as road maintenance services legitimize their actions through executing explicit practices that are formalized in plans and programs. If those explicit practices, together with implicit practices are not enough to prevent a crisis, we hypothesise that the organizations expect blame to rise from outside and the organizations shield themselves with their own narratives of inculpability to avoid losing legitimacy and thus, resources, or even protect members of the organization of individual liability that could include prosecution. The interaction between perceived expectations, organizational culture (e.g., shared values and beliefs) and predominant narratives of the organizations deserves further attention in research, but was not the scope of this paper.

When we dive deeper into the anticipatory actions that are talked about in the narratives of past event, mostly we hear accounts of explicit practices, hence practices that are embedded in official emergency management or organization management regulations (Baker, 2014). To give an example, in many narratives, regulations for on-call duty, stand-by and general remarks about labor laws are brought up in the context of practices to increase preparedness. However, narratives are part of the organization itself as they are accounts that are told and retold and subsequently, become practices themselves. As day to day activities not directly connected to preparedness, they can be understood as implicit practices. Explicit together with implicit practices form a symbiosis to be able to deal with crisis. Hence, anticipation of future crisis cannot be seen without implicit practices. Inside implicit practices, narratives play an important role on how the past is evaluated and future anticipated and thus, how crises are dealt with. This opens up room for further research into this interplay, how other forms of plotlines and frames are incorporated into organizational narratives and how this affects sensemaking.

6 | CONCLUSION

This paper has shown that studying organizational and individual narratives is essential when researching the anticipation of extreme weather events. Narratives of past events shape the imagination of future events and can, depending on the narrative plot and threshold of the event, affect practices of anticipation. After a crisis, blame is attributed to something or someone to make sense of the event. The two fields observed use two distinct plotlines in their narration of past events: the *human factor* and *fate*. Even though in the narratives different attributions of blame are employed, the outcome is similar: a loss of agency for the organizational actors and hence, the perception of futility for preparedness measures. When the plotline of blame however focuses or shifts on the organization and its own role in the event, change can be fostered and anticipatory practices adapted.

AUTHOR CONTRIBUTIONS

Jasmina Schmidt: Investigation; data analysis; conceptualization; methodology, writing – original draft preparation; **Nikola Tietze**: Data analysis; **Lars Gerhold**: Funding acquisition; writing – review & editing; **Thomas Kox**: Conceptualization; methodology, funding acquisition; writing – review & editing.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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