

**MUD, METAPHORS AND POLITICS: MEANING-MAKING DURING THE
2021 GERMAN FLOODS**

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Abstract

On 14 July 2021 the western states of Germany, Rheinland Palatinate and North-Rhein-Westphalia, experienced major flash floods and about two hundred people died. This article explores how those affected and journalists they spoke to created meaning from the mayhem of an unprecedented disaster and how social representations of flooding emerged in which language, politics and values were intimately intertwined. Combining thematic analysis with elements of social representations theory, and analysing a sample of articles from a national news magazine, we show how social representations of the floods were shaped by the objectification of the floods through metonymy (mud and debris) and the anchoring of the floods through personification and metaphors (natural and mechanical forces), thus adding a new dimension to the existing body of work on

flood and metaphors. We claim that the immediate focus on the extreme force of the 2021 floods, on the one hand, and the weakness of political response, on the other, may entrench feelings of helplessness and divert attention away from more systematic and long-term engagement with flood dangers in the context of climate change, including extreme weather events.

Keywords

extreme weather events, floods, Germany, metaphor, social representations, media, meaning

Introduction

In recent years, the world has experienced multiple extreme flooding events in Africa, Australia, Western Europe, India, Pakistan, China, California and many other countries. The floods in Western Europe also affected Germany, the focus of this article. On 14 July 2021, the western states of Germany, Rheinland Palatinate and North-Rhein-Westphalia, experienced extremely heavy, prolonged and intense rainfall; rivers and creeks flooded and almost two hundred people died (see Cornwall, 2021). Germany is used to floods. Many German rivers are remembered for their floods: the 1995 Rhine floods, the 1997 Oder floods, the traumatic 2002 Elbe floods, repeated in 2013. Even compared to these floods, the flash floods of 2021 were unprecedented; they came as an utter surprise to scientists, politicians and, of course, the general population (see Fekete and Sandholz 2021). These floods were also different, affecting not just one big river, but every river, rivulet and creek in the

region. In this, they were more similar to the European floods of 2016. The floods came suddenly, fast and had extremely destructive effects.

This stimulated, yet again, debates about links, attributions and uncertainties regarding climate change and extreme weather events, especially ‘Starkregenereignisse’ (extreme or forceful rain events), discussions that had started after the summer floods of 2002 (see Weingart 2002). This also triggered urgent debates about science, warning systems and politics, in particular as the floods happened seven weeks before a general election and the election campaign was in full swing. Science, politics and people became intertwined in the reflections and reactions following the floods, and also in the language and metaphors used to do so.

In this article, we examine this entanglement through the lens of metaphor and metonymy analysis and reveal emerging social representations attached to flash floods that overwhelm normal understanding. In doing so, we gain insights into how people make sense of extreme flooding events, over and above calculations of risk and resilience. Metaphors are used to make meaning, to make unfamiliar or unprecedented phenomena, dangers and threats more familiar so that people can cope with them. Metaphors are part of storytelling. As Scrase and Sheate (2005: 117) state in their article on flood control in the UK, “[p]eople tell stories to attach meaning to events going on around them, to fit their observations to their values, and to relate that meaning to particular contexts of social behaviour or action”. We show how this is done through metaphor, but also metonymy.

We study in detail some of the stories recounted by those impacted by the 2021 floods and how they attribute meaning to them and assimilate the unbelievable to their beliefs and values. We gained access to such stories, indirectly, through an

analysis of a series of articles in one national news magazine, after journalists had talked to people coping with the aftermath of the floods and tried to extract meaning from them in the broader context of German politics. This magazine was *Der Spiegel*, which has historically shown interest in climate change and extreme weather.

In 1986 *Der Spiegel* emblazoned its cover with a picture of Cologne Cathedral half-submerged by water (an hour's drive away from the first author's hometown, Stolberg, Rheinland, site of some of the most severe flooding). This was supposed to illustrate the possible threat of sea-level rise brought about by climate change. It was an early call for 'Klimaschutz' (protection of the climate) in order to prevent a 'Klimakatastrophe' (climate catastrophe). In 2021 this iconic image came to depict reality. The first author read articles in *Der Spiegel* as they appeared, and the stories she read chimed with her lived experience of the flood. As an article on the Brisbane floods of 2011 said, the news media is "one important vehicle of several through which the flood could be understood and internalized. Examining how the flood was framed in the media provides insight into the broad public perception of floods" (Bohensky and Leitch 2014: 475). In this article, we show that such perceptions go beyond risk perceptions and resilience calculations, which have often been the focus of research into floods and people (Cologna and Paavola 2017; Devitt and O'Neill 2017).

In the following, we first provide some background to the 2021 German floods. We then detail how our study is positioned in relation to other research dealing with floods and metaphors and then outline our main research questions and how answering them might provide people engaged with climate change and extreme weather communication with a deeper understanding of the priorities and values of

those affected by unprecedented floods. In the past, climate change and extreme weather communication activities have understandably focused mainly on risk, science and sometimes health. However, we argue that listening to the stories people tell might give such communications a more person-centred grounding, as this provides insights into lived experience, meaning-making, and emerging social representations.

As Peter Howe, an expert in environment and society issues, has pointed out, “[a]s the impacts of climate change become increasingly evident at the local level, it becomes increasingly important to understand how these [personal] experiences interact with other factors to shape mitigation and adaptation decisions” (Howe 2021: 127).

The German flood of 2021

On 14 and 15 July 2021 a slow-moving large summer storm system moved across Germany and neighbouring countries. What is now generally called a ‘rain bomb’ and clearly attributable to climate change, discharged up to 150mm of rain within 48 hours and affected mainly two federal States, namely North-Rhein Westphalia and adjacent Rheinland-Palatinate. Water level data at stream gauges across Western Germany surpassed historical water level maximums and many stations were wiped out completely. More than 40,000 people were affected and 196 lives lost (see Anonymous 2022a; Mohr et al. 2023; Cornwall 2021).

These events made extreme weather and climate change electoral issues. The first day of the floods occurred on 14 July, a day before campaigning for the election of Germany’s next parliament on 26 September should have begun. “Olaf Scholz, the

Social Democrats [SPD] candidate for chancellor, got his rubber boots on and headed out to the scene with his rival, Armin Laschet, who [was] [then German Chancellor Angela] Merkel's Christian Democratic Union (CDU)'s candidate. But although they travelled together, their respective visits had very different results" (Crowcroft et al., 2021). Laschet's visit was a disaster marked by a number of gaffes. In the end, The Greens achieved their best result in history and the SPD entered into a coalition agreement with the Greens and the FDP (Free Democratic Party) and, in December 2021, Olaf Scholz was elected Chancellor and succeeded Angela Merkel.

Conceptual background

Since around 2010 a growing body of literature has emerged around flooding and media reporting (see Escobar and Demeritt 2014). One chapter of the *Handbook of Climate Change Communication*, which focused on media reporting of the UK winter floods in 2015/16 makes an important point which guided our analysis: "Given that increased flood risk due to climate change is a reality, and that there is evidence that this increased risk is not yet understood by the public, nor addressed by the media, we suggest that a change is needed. Not only is there a need for more dialogue between those at risk and the flood risk management authorities and between experts and the public and the media and the public, but also a need for improved risk communication delivered with greater understanding of how at-risk communities perceive risk" (Cologna et al. 2018: 277). Building upon this work, we suggest that a focus upon human and environmental values is also important.

Another older and smaller strand of scholarship has focused on the socio-cultural and linguistic study of floods, including the study of metaphors as socio-

cultural sense-making devices and on the ways in which people affected by floods make sense of them. In Germany, a pronounced focus on metaphor emerged after the 2002 summer floods. These floods in particular left a mark on German climate discourse, as noted by the sociologist of climate change Peter Weingart in 2002: ‘The great summer flood has once again flushed climate change into the media. The waves of this discourse swept into the feuilleton, behind which there is always some clever mind’ (Weingart 2002: 20; see also Weingart and Pansegrau 2002) (All translations are ours).

One of the pioneers of this type of study has been Martin Döring, who wrote a thesis and several articles about German floods, media reporting, metaphors, and German politics from around 2003 onwards, focusing on the Oder floods of 1997 (Döring 2003, 2005, 2017). Alongside this research, a research project was devoted to studying the ‘floods of images’ that emerged after the Elbe floods in 2002, a project led by the anthropologist Werner Krauss. Again, they focused on the language used, although less on metaphors, and on the political context in which it was used: ‘We document and analyze how the flood is emotionalized and historically classified, placed in a national framework and linked to daily politics’ (Krauss and Rulfs 2003: 7). Both Döring and Krauss have closely studied the links between language, environment and politics afforded by floods.

Alongside these texts on German floods and metaphors, Bošnjak and Trišić (2015) have written about the Balkan floods of 2014, using metaphor analysis to study media reports. As they note, ‘[t]he analysis offers insight into long-standing, conventional metaphors related to floods and natural disasters as well as the specific

realizations and elaborations of these and other metaphors in the context of the 2014 Balkan floods.’ (Bošnjak and Trišić 2014: 1)

We continue this tradition of research into floods and metaphors and ask: Have metaphors stayed stable or have they changed over time, given the changes in temporal and geographical patterns of extreme flood events? What are the broader implications of these metaphors for social representations of the 2021 floods? What social, political or environmental values were encapsulated in the use of these metaphors and metonymies? In seeking answers to these questions, the article contributes to thinking about climate change as part of culture, language and everyday life (Hulme 2017).

Metaphors and social representations

Since the 1980s, cognitive linguists, such as Lakoff and Johnson (1980), have shown that metaphors are not just rhetorical flourishes but pervade ordinary language, and structure how we think and talk about the world, how we act or, indeed, fail to act in the world and what we value in and about the world. They enable speakers to talk about something abstract or ill-defined in terms of something more concrete and better-defined, about something unfamiliar in terms of something familiar. This process relies on conceptual metaphors as overall mappings between conceptual domains, such as, say, ‘love’ and ‘journeys’, a mapping that underlies the conceptual metaphor LOVE IS A JOURNEY (conceptual metaphors are usually rendered in small capitals). When we speak we produce metaphorical expressions based on such mappings (conceptual metaphors), such as ‘We have come to the end of the road’.

Such mappings also provide us with ways of talking about immigrants as floods, a well-studied aspect of recent political life (Musolff 2015); as in: “We should stop illegal immigrants flooding the country” – a value-laden metaphor. Here we map some aspects of what we know about floods onto the topic of immigration.

Conversely, we can map aspects of what we know about people or animals onto our understanding of floods and say ‘The river devoured the town’, for example, where the conceptual metaphor FLOOD IS A BEAST is used to conceptualise what is happening (see Bošnjak and Trišić 2015, n.p.). As Hauser and Fleming have pointed out recently: ‘Wildfires ravage forests. Hurricanes pummel shorelines. Floods creep through cities. These metaphors are unlikely to be mere linguistic flourishes. This is because, according to conceptual metaphor theory, representation for abstract, difficult-to-grasp concepts is scaffolded on easier-to-understand source domains.’ (Hauser and Fleming 2021: 571)

Cognitive linguists have also studied another ‘figure of speech’, namely metonymy (Radden and Kovecses 1999). Whereas metaphors establish mappings between distant conceptual domains, such as ‘love’ and ‘journeys’, metonymies establish mappings within the same experiential domain or conceptual structure. An example of a metonymical expression is ‘The kettle is boiling’, where ‘the kettle’ stands for ‘the water’ or ‘The Kremlin announced’, where Kremlin stands for the government of the Russian Federation or for Putin – a rather value-laden metonymy. Metonymies exploit spatial, temporal, causal and similar relations.

The study of metaphors (and metonymies) is also central to Social Representations Theory (SRT), which was established to examine the emergence of collective understandings that make the unfamiliar familiar (Moscovici 1988). SRT

studies how cultural meaning systems emerge and evolve (see Jaspal and Nerlich 2020). A social representation is defined as a network of ideas, values and practices in relation to a given social object which facilitates communication about it. A novel abstract, difficult-to-grasp or, indeed, highly traumatic phenomenon, turns into a social representation when it is anchored to, and objectified in terms of, other phenomena that exist in societal consciousness. Anchoring refers to the process of making something unfamiliar understandable by linking it to something a group or community already knows about. Anchoring is therefore closely related to the use of metaphor and metaphor analysis. Objectification is the process whereby unfamiliar and abstract objects are transformed into concrete and 'objective' common-sense realities, and, as we show, this happened in our case through the process of metonymy. This novel combination of metaphor/metonymy analysis with SRT allowed us to gain insights into emerging representations of a deeply traumatic and, in Germany, unprecedented event.

Method

In order to assemble a manageable corpus of newspaper articles that could be studied using qualitative methods, we trialled various search terms on the news database *Nexis* which also covers German newspapers, magazines etc. Using the search terms 'Hochwasser' OR 'Flut' OR 'Unwetter' OR 'Überschwemmung' (high water, flood, storm, flooding), we searched German newspapers for the period between 10 July and 10 August (on 10 October, 2021). We found that most articles on the catastrophe appeared in newspapers that were published in the regions of Cologne and Aachen, which were badly affected by the floods, such as the *Rheinische Post*, *Kölnische*

Rundschau, *Kölner Stadt-Anzeiger*, and the *Aachener Nachrichten*. We found a high number of articles. The numbers (over 1000 for the first two newspapers, over 500 for the last) were too high for an in-depth qualitative analysis. A survey of the first 50 articles in the *Rheinische Post* revealed that most of the articles focused on very specific local occurrences and people. We explored magazines instead of newspapers, as weekly magazine articles might provide more of a bird's-eye view of the floods and more in-depth reporting of national and global relevance.

Der Spiegel, which published the iconic front-page image of Cologne cathedral under water in 1986, is Germany's leading weekly news magazine with over five million readers, including many leading decision makers, as of 2021 (Grabowski 2021). At Stage 1, we therefore searched it for a month, between 10 July and 10 August 2021 and found 47 articles, of which only 16 in-depth ones were relevant. At this stage, we gathered a small but select corpus, which we studied using thematic analysis, as detailed below. This small corpus is essentially a case study (see Jaspal et al. 2021), in the sense of an exploration of a single event, community or, in our case, news coverage, which might shed light on larger issues, trends or problems, such as the relations between science, floods and national politics.

At Stage 2, we examined an additional larger Spiegel-corpus, namely *Spiegel Online*. From this we extracted 117 articles for our time period, using the same search terms. We found that, overall, there was a stronger focus on local events (e.g., looting of particular shops in particular towns) and on local politics and that there were fewer eye-witness accounts/human interest stories and fewer salient metaphors. All the themes we had seen in the small corpus were also covered in the larger one and were of national importance. Stage 2 of our analysis operated as both confirmatory of the

main findings of Stage 1 although this enabled us to elaborate upon the themes initially identified.

We analysed news articles using qualitative thematic analysis, which is ‘a method for identifying, analysing and reporting patterns (themes) within data’ (Braun and Clarke 2006: 78). The method was used to identify emerging social representations of the German floods of 2021 and linguistic and rhetorical strategies, used to construct and substantiate these representations. Thematic analysis can be informed by theory, such as SRT (e.g., anchoring, objectification) and tenets of metaphor analysis (such as the grouping of metaphorical expressions into broader conceptual metaphors).

Following the analytic steps outlined in Jaspal (2020), we began by reading and re-reading the news items in the corpus. During each reading, we noted initial observations that captured the essential qualities of the items, focusing on units of meaning, instances of anchoring and objectification, and linguistic and rhetorical strategies used to construct meaning. We discussed our respective initial codes, which included general tone, forms of language (e.g., metaphors), comparisons, categorisations and emerging patterns. These initial codes were then collated into preliminary themes which responded to the original research questions. The final three themes were arranged into a coherent narrative structure.

Analysis and Discussion

During the 2021 flash floods, some towns became iconic places of devastation, such as Erftstadt, Ahrweiler, Schuld, Hagen, and Stolberg (the place where the first author was born). Local newspapers all told stories of devastation. Some of them were retold

as nationally important ‘Augenzeugenberichte’ or eyewitness accounts in lengthy investigative articles and opinion pieces in *Der Spiegel*, the focus of our analysis.

In the next subsection, we closely examine the first article published after the events to gain some insights into immediate reactions and emerging themes. This first article established a social representational context in which subsequent reporting occurred. We then present a systematic analysis of themes and conceptualisations in a corpus of 16 in-depth articles published in *Der Spiegel* between mid-July and mid-August. These provide some initial insights into social representations of the floods as they emerged in Germany. We use italics to highlight metaphorical expressions and small capitals to highlight conceptual metaphors.

An examination of the first article on the German floods

We begin by providing a detailed qualitative examination of the first article focusing on the German floods, as this article essentially sets the scene for subsequent media reporting and was written during the unfolding drama. The title of the article was ‘Die Wetterwende’ – the weather transition (Clauß 2021), a lexical compound that, in German, maps onto the controversial topic of ‘Energiewende’ or energy transition (see Paul 2018). Using the word ‘Wetterwende’ or weather change or weather ‘turn’, the article alludes to the notion that ‘weather’ will never be the same again and that the July floods are a harbinger of more extreme weather events in the future. The word also echoes ‘Energiewende’, and therefore suggests links with the issue of climate change, on the one hand, and a transition to low-carbon energy politics, on the other. For Germans, the simple lexical compound ‘Wetterwende’ has significant political implications.

The flash floods happened just when election campaigns were starting. As the article states, using a flood metaphor to talk about politics: ‘The flood catastrophe *‘burst’* into the election campaign and put climate change centre stage.’ This echoes what many who lived through the floods felt, as the water burst into or through their houses. ‘The election campaign is being rearranged with a force that only forces of nature can produce.’ As we shall see, navigating this ‘exploded’ election landscape within a devastated real landscape was challenging for politicians from all parties. We shall also see how one linguistic landscape was mapped onto the other in the course of discussing these devastating events. The theme of ‘force of nature’ was, in the process, also mapped onto the theme of ‘weakness of politics’.

The article goes on to relay various tragic stories as recounted by those affected by the floods and describes those telling the stories. One recurrent theme emerges: the aftermath of the floods is personified/objectified by the mud left behind on everything: ‘His legs are covered in mud up to his hips and he has mud stains on his face.’... Phrases like ‘full of mud’, ‘wading through mud’, ‘world of mud’ etc. are ubiquitous. Mud becomes the icon of the floods and the suffering of the people, alongside debris, scrap, rubble and waste. It is linked to dirt and filth, as an exhibition in Australia highlighted some years ago, entitled “Drought, Mud, Filth, and Flood: Water Crises in Australian Cities, 1880s–2010s” (Gaynor et al. 2019). Mud stands metonymically for flood (it is its causal result) and metaphorically for suffering. Indeed, this is consistent with the observation that mud has been used metaphorically to symbolise danger, devastation and disease (Goldblatt 2017). This focus on mud might have been overlooked in previous research on flooding and how it is framed in

people's minds and in the media. Interestingly, in flood-prone Brisbane, Australia, people set up what they called a 'mud army' (Anonymous 2022).

Over and above these images of dirt and devastation, journalists (and the people they interviewed) also used metaphors for the destruction caused by the floods and the floods themselves. The floods are conceptualised as (other) natural forces, such as avalanches and tsunamis, or as mechanical forces, such as juggernauts, steam rollers or bulldozers. These metaphors all focus on the extreme force and impact of the floods and are themselves 'reinforced' by the use of impactful words such as 'Wucht'. 'Wucht' translates as force or impact, but the word conveys more than that, for example, power, momentum and also shock. 'She shows a video on her smartphone, showing a torrent flowing through her house. "It was a water *avalanche*."'

These early stories of people's pain and suffering, of people losing everything they value, recounted using images and metaphors, intermingle with stories about the politicians who visited them or were supposed to care for them, especially when their image management goes wrong, as it did at least twice in the case of Armin Laschet, premier of North Rhine-Westphalia, and (during the floods) candidate for the Chancellorship in Germany's national election. For example, Clauß reports:

Laschet did not tweet at first, but was there early. But then, as is so often the case, he gave an unsuccessful television interview, quickly became quarrelsome when asked about his climate policy and said: "Because this is such a day, you don't change politics." He will probably never get rid of that sentence. (Clauß 17 July)

A few days later he was seen laughing in the background of a video from a scene of devastation, a video that went viral¹. The only thing he seemed to value was the photo opportunity, so it seemed, not the lives and livelihoods of the people he represented. Seven weeks later the election took place and Laschet and his party, The Christian Democrats, narrowly lost out to the Social Democrats. The incident reported in *Der Spiegel* echoes Scott Morrison, Prime Minister of Australia, saying during Australia's devastating wildfires at the beginning of 2021 that it was not the time to talk about climate change, and that those who did were merely trying to score political points (Albeck-Ripka et al. 2020). However, as the *Spiegel* article points out:

‘Unemployment statistics can be glossed over, gaps in the budget can be concealed. Not the weather, it raises questions: What can be done to prevent such catastrophes from becoming the norm?’ (Clauß 17 July). It is impossible to hide from the weather or to hide from the questions raised ‘by the weather’. Normal politics no longer works.

This issue of ‘playing politics (‘Politik machen’) with the floods’ is discussed in other articles, as well as the ways some politicians, especially those from the Green Party, avoided that trap and others did not. Debates around these issues are described as a ‘Kampf’, a battle. Here the *Wahlkampf* or election battle collides with a battle over interpretation, where some attribute the floods to climate change and others refute the link.

¹ https://www.youtube.com/watch?v=g_5RxD3Q58E

Our close analysis of the first image-rich article on the floods published in *Der Spiegel* revealed some emerging themes that structured media articles and also people's stories reported therein. By reading and re-reading our small corpus of articles, we found that three themes in particular structured the way the floods were conceptualised, namely through:

- (1) The objectification of the floods as mud and debris through the use of a core metonymy.
- (2) The anchoring of the floods in personification and metaphors of natural and mechanical forces.
- (3) The intertwining of the dirty floods with dirty politics and an emerging feeling of insecurity and mistrust as political values clash with human and environmental values.

Theme 1: Flood and mud – objectification through metonymy

Objectification plays a clear role in the formation of social representations of extreme weather and climate change. As Höjier (2011: 12) has pointed out: 'When, for example, the media attach specific storms, heat waves or floods to climate change the abstract phenomenon is objectified.' The German floods certainly objectified climate change and put it back on the agenda. However, there was yet another process at work. Objectification 'makes the unknown known by transforming it into something concrete we may perceive and touch and thus control' (p. 6). In our case, various 'objects' came to objectify the unprecedented floods.

Højier speaks of emotional objectification when certain iconic images, such as polar bears, come to stand for unknown and fear-inducing aspects of climate change.

As Moscovici (1984: 38) states: ‘To objectify is to discover the iconic quality of an imprecise idea or being, to reproduce a concept in an image’. In our case, one aspect of the floods acquired iconic status and stood in for the floods and their aftermath as a whole through a process of metonymy, and that was *Schlamm* – mud. The floods vanished very quickly. *Schlamm* remained -- a verbal and visual reminder of the floods. It came to stand for the abstract issue of climate change, on the one hand, but also for all the concrete struggle and suffering it causes when it manifests itself as an extreme event, such as a flood, on the other.

Mud, rubble, sludge and sewage are what is left behind when a flood recedes and all that is valuable is lost. Even when it is gone, people stand in mud and mud stands, metonymically, for the floods, which, in turn can stand for climate change – an association that may be side-lined by a focus on the mud it brings rather than what caused the mud. This is, in a way, a chain of metonymic cause and effect connections – reaching from climate change causing floods to floods causing mud to mud causing trauma (Radden and Kövecses 1999: 38). As an analyst of the 2007 summer floods in Hull in Northern England observed: ‘It is only when the flood water departs and you are left with mud, sludge and sewage that it hits you. Now begins the heartbreaking task of throwing away your personal belongings, moving out (or upstairs) and watching your home being taken apart – sometimes brutally – by builders’ (Whittle et al. 2010).

In our corpus, one long and detailed article in particular focused on this traumatic aspect of flooding, entitled ‘Tal der Trümmer’ (Vale of rubble) (Bartsch 24 July). The journalist went to Bad Neuenahr, one of the worst affected places and listened to people’s stories:

Around midnight, Jutta Schelleckes and her husband go back down to their own apartment, from which the water has withdrawn like after a *battle* that has been won. You now see the *enemy* that all the inhabitants of the Ahr will *fight* against in the next few days: the mud. (Bartsch 24 July)

Personification was key - floods were conceptualised as an enemy and dealing with them was a war. But *Schlamm* also became an enemy with which people engaged in battle – mud and military metaphors combine, reminiscent of muddy battlefields of the past. Mud, has engulfed everything: “There was even mud in the overhead cabinets in the kitchen. ... The mud was up to his knees” (Bartsch 24 July). ‘He sees: a truck on its side, uprooted trees, rubble, debris and, above all, mud’ (Bartsch 24 July). Through a chain of cause-effect metonymies, mud, sludge, sewage and rubble left behind by the floods objectified the floods’ deadly force, a force that highlighted the weaknesses politics in the face of extreme weather events.

Theme 2: The power of nature – anchoring through personification and metaphors

While the floods were (metonymically) objectified as mud, they were also anchored as social representations through personification and other metaphors. Floods became inimical objects and persons. This type of animism is perhaps the oldest way of thinking about something unfamiliar and fear-inducing, such as unexpected flash floods. As Döring pointed out in relation to the Oder floods of 1997:

A close look at the newspaper coverage during the Oder flood in 1997 shows clearly that personifications, for instance, play a central role in understanding what happened. Thus, the river is metaphorically conceptualised as a kind of being or person which is acting intentionally (Döring 2003: 200).

A flood turns into a wild beast, indeed a monster, and also an opponent that needs to be fought and tamed – war metaphors of attack and defense are common. Floods are imbued with intentional action as they press against dykes or reconquer abandoned land (see Döring 2003). Bošnjak and Trišić (2015) found similar personifications being used in press reports on the Balkan floods of 2014. They found that the monster showed rage and frenzy and no mercy. One conclusion that many of those living through the German floods came to was that the beast is perhaps no longer tameable: ‘Sometimes the only thing left is the realization that nature cannot be tamed. And man has to give way’ (Dettmer 24 July).

Before the 2021 floods, people thought they knew the temperament of the river and did not think the river could surprise them. That changed: ‘The people here know the Ahr like you know a *long-time, capricious friend*’ (Bartsch 24 July). Almost trying to live up to a book mentioned in the German press reports by the climatologist Friederike Otto, *Wütendes Wetter* (Otto and Brackel 2019), the river Ahr in particular became an enemy full of sound and fury (‘wütend’, Bartsch 24 July). ‘You can hear a flood, says the winemaker Sermann, there is a deafening roar, it roars, and suddenly it shoots through the streets’ (Bartsch 24 July). ‘In the evening the flood came, it *tore* a swath (Schneise) through the place, every fourth inhabitant lost his home according to the current situation’ (Gathmann 24 July).

The word ‘Schneise’ is interesting here. It is normally used in German to refer to ‘firebreaks’ cut into the forests to prevent wildfires and protect people. But in common German parlance one also talks about ‘Schneisen der Verwüstung’ – a relatively common metaphor – to refer to swathes or trails of devastation left behind by hurricanes, for example. In the context of the floods, the word ‘Schneise’ was used to describe the devastating path cut through towns and villages by the floods – the semantic valency of the word changes from positive to negative. In Stolberg, such a ‘Schneise’ cut right through the heart of the town. What is worse, it is not only impossible to tame the monster, the efforts at taming it itself have proved fatal: “The attempted *taming* of the river combined with an unprecedented heavy rain paved the way for the catastrophe, she believes” (Bartsch 24 July).

Some articles put the question about the causes and effects of the flood into the broader context of climate change and the issue of tipping points. Questions are being asked repeatedly about whether and how one can attribute particular extreme weather events to climate change. Personification is used to talk about climate change and extreme weather. Researchers point out that the ‘climate changed by humans shows new and unexpected *behavior* for the first time’ (Collini 7 August). The article also uses words like ‘mad’ and ‘madhouse’ (‘Klimatollhaus’), ‘moody’, ‘capricious’, ‘cooking a nose’ about the weather as an agent. The journalist then points out, quoting Johan Rockström, a Swedish climate scientist: ‘And whoever *wakes one of the climate demons* threatens to *unleash a swarm of more*’. Such ‘demons’ were unleashed on Ahrweiler, where they became killers. Here personification merges with an overarching conceptual metaphor.

FLOODS ARE KILLERS

Two aspects of the floods puzzled people: how could little tiny creeks and brooks, as in the case of the first author's village, the Hasselbach and the slightly bigger Vichtbach, cause so much devastation; and how far away from any creek, brook or river should people live their daily or their recreational lives; and how can one adapt to this? One person in Ahrweiler died trying to check on his campervan which should have been safe, that is, at a safe distance from the river: 'Actually, his caravan was far enough away from the river that *meandered peacefully* through the West Eifel. Until the Prüm turned into a *deadly stream* on July 14th' (Bartsch 31 July). Paradise was lost: "'Dernau was like the *paradisiacal Garden of Eden*, within 20 minutes it became a *desert*'" (Bartsch 31 July).

When the first author visited her home town, Stolberg, she heard many people say that the floods were worse than the devastation wrought by the Second World War. Burnt-out tanks had littered parts of Stolberg after the war. Therefore, it was especially poignant when a tank, 'ein Panzer', had to be brought in to clear the streets of rubble (Anonymous 2021). Tanks like this were used alongside every type of vehicle possible to clear away the rubble, debris, and, of course, the mud - a real war scenario: 'Every morning a column of garbage trucks, trucks and canal vehicles meanders down into the valley, where it looks to the left and right of the road like a *bombing battlefield*' (Bartsch 31 July).

The German floods were not called 'rain bombs', but in 2022 this has become a new term for such floods, for example the ones in Queensland, Australia in March 2022. They are also called rivers or even conveyor belts of rain (Ferner 2022), a type of 'heavy precipitation' to which it is very difficult to adapt. As the summary for

policy makers of the February 2022 IPCC report pointed out: ‘The rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt’ (IPCC 2022). The Pakistan floods in the summer of 2022 demonstrated this in abundance. Here many people lived in mud houses they called home. Now everything is just mud. What was once valued is completely annihilated.

While Pakistan has lived with floods for a long time, what happened in the country in 2022 was not at all a familiar event. Similarly, while river-floods have become a familiar phenomenon in some parts of Germany, flash floods of the magnitude experienced in 2021 were not at all familiar; indeed, they were often described as unimaginable and unbelievable. However, while unexpected and unfamiliar in their severity, understanding was partially based on using patterns of interpretation that have emerged and become entrenched since the floods of 1995, 1997, 2002 and also 2016. These patterns were well-described in the media analysis and ethnographic study of the Elbe floods by Krauss and Rulfs (2003). They wrote:

Superlatives such as the flood of the century or millennium or collective symbols such as the biblical flood, war and apocalypse express the drama of the situation. Emotions are awakened by stylistic means, in that the merciless power of the forces of nature is countered with the description of loss and despair, helpfulness and new hope (p. 9)

These patterns can be found in our corpus of press articles on the 2021 floods as well, with a special focus on ‘the merciless power of the forces of nature’. They can be used to anchor emerging social representations and entrench them further.

RIVER FLOODS ARE (OTHER) NATURAL FORCES: AVALANCHES and TSUNAMIS

Some people conceptualised the floods as an avalanche – which has a similar destructive force, destroying everything in its wake. Here knowledge of the destructive force of an avalanche is mapped onto the phenomenon of an exceptional river flood and a river flood is not one horizontal wave as in tsunami. Of course, the white colour of the snow does not match up with the mud of the river flood.

Metaphors foreground certain aspects of a concept, those that can be used to make the unfamiliar familiar, and attenuate others. The issue highlighted by the metaphor is the force, the ‘Wucht’ of the downpour, a downpour that turns human structures supposed to shelter us into toys tossed about blithely: ‘Down below, in the town center between Hauptstrasse and Ahrstrasse, houses collapse in the muddy-brown floods and are *washed away like toys* (Bartsch 24 July).

The force (*Macht* or *Wucht*) of the floods was also compared to that of tsunamis, which, unlike avalanches, are not really something Germans have ever directly experienced, but something that rose to particular prominence in people’s extended experience through the New Year Eve’s tsunami of 2004 and the Fukushima disaster in Japan of 2011: ‘In a press conference he [District Administrator Pföhler] said that *the flood was ‘like a tsunami’, ‘which overwhelmed everyone’. The question of evacuation was also practically submerged in the floods’* (Bartsch 31 July). There had been warnings but an overwhelming flood of this magnitude had not been

expected. Evacuation warnings therefore often came too late. The aftermath was especially visible from the air. A helicopter pilot tells of his flight into the disaster zone, from paradise to hell: 'Then: the apocalypse. On the upper slopes: the vines of the winemakers. Down in the valley just a meandering, brown swamp of water and mud. A *'tsunami'*, thinks Lübke, that is how he describes it later. He doesn't know anything like that before' (Bartsch 24 July). Nature totally overwhelmed culture and, with it, human control, both in terms of what humans built along the creeks and rivers and in terms of cultural cognition and experience. The floods were beyond belief.

Alongside nature-derived metaphors of avalanches and tsunamis, people also conceptualised the floods and their force through images of well-known mechanical devices, such as bulldozers, juggernauts or steam/road rollers, 'Walzen'.

FLOODS ARE MECHANICAL FORCES: BULLDOZERS AND STEAM ROLLERS

As we have seen, one aspect of the floods that was captured in the metaphors was their sheer overwhelming force, their 'Wucht'. This can be highlighted through metaphors mapping the floods onto other natural forces, but also through mappings between the floods and mechanical forces. Although we did not find direct comparisons with juggernauts or bulldozers, the after-effects of such mega-machines were conceptualised through words such as 'walzen' - streamrolling. Everything, from meadows to buildings, houses to vehicles was steamrolled: 'Wiesen, die vom Wasser *platt gewalzt* wurden' (Bartsch, 24 July). Steamrolled meadows are bad, but steamrolled villages are worse:

At the beginning of the valley, in Altenahr, you can see a desert of rubble. Torn away houses, damaged bridges. Along the course of the river: demolished railway tracks, a country road that simply breaks off and sinks into a hole. There is nothing left of some of the settlements that were directly on the shore. You can still see the foundations. The rest: *rolled flat*. (Bartsch 24 July)

The fact that the floods acted as bulldozers and devastated nature and civilization raises the question of how civilisation can be reinstated and where. ‘One also suspects that there will be difficult discussions about whether the reconstruction should take place exactly where the flood *crushed* everything’ (Hoffmann 24 July).

Theme 3: The silence of the sirens – symbols of political failure

When examining the first article in our corpus we found that Laschet attracted much anger, as he misjudged various appearances and especially after having been filmed laughing in the background of a video. As one *Spiegel* reporter said in a later article: ‘Even the media in Japan report on Laschet's laughter. It is quite possible that the lapse will still hang on him when the first houses in North Rhine-Westphalia are rebuilt’ (Eberle 24 July).

Using an iconic image from the floods, mud, as a metaphor for a failing politician, the journalist asks: ‘The question is whether the mistakes stick to him like the mud on the houses in Bad Münstereifel’. However, mud did not only stick to buildings, but also to people, and metaphorically to the reputation of politicians. ‘The Prime Minister of North Rhine-Westphalia and CDU candidate for Chancellor visited

emergency shelters, stood in front of broken houses and talked to flood victims who had mud stuck on their faces' (Hausmitteilung 24 July). The images of mud became not only metonymies for the floods but metaphors for dirty politics.

One article, with the metaphorical title 'Voll im Regen' (Full in the rain – referencing the scorn being poured out over the politician), dissects these missteps by Laschet and quotes one potential voter as saying: 'Have you ever been digging (gebuddelt) in the mud for a week?' Calls out a resident to Laschet' (Clauß 7 August). Dirt and filth, 'Schmutz und Schund' (the title of one article) became bywords for dirty and failed politics, but also for the general background against which the floods and the election campaign played out, namely the flood of fake news, hate speech and misinformation (Baumgärtner 24 July). This echoes events during the Elbe floods of 2002:

Election campaigns for the Bundestag and floods are both media phenomena, and neither politicians nor media manage to draw a clear dividing line. The flood gains a political momentum of its own, is instrumentalized and, at least according to opinion research institutes, turns the tide in the election campaign (Krauss and Rulfs 2003: 14).

The emerging social representation is one of decreased political and institutional 'control' or power over the situation. This may engender mistrust or feelings of decreased self-efficacy, which in turn may undermine our ability to manage climate change/ extreme weather.

One article in our corpus was entitled ‘Das Ende der Sicherheit’ (The end of security) (Hoffmann 24 July), another, ‘Schutzlos in Deutschland’ (Defenseless in Germany) (Ankündigung 24 July) and yet another ‘Ausgeliefert’ (Helplessly exposed; surrendered) (Gathmann 24 July). Under the reign of Angela Merkel, many had felt secure – with Merkel conceptualised as a ‘mum’: ‘The recipe for success in the Merkel years was the promise of protection made by *Mutti Staat*, a feel-good democracy that leaves its citizens as undisturbed as possible by the unreasonable demands of reality’ (Hoffmann 24 July). Then came the pandemic, and then the floods.

The warning system, if indeed there was one, failed, as warnings from scientists and meteorologists were diluted along the chains of responsibility and most of ‘the messages run into the void’ (Gathmann 24 July). This was partly due to technology, partly human nature and mostly human imagination. Knowledge collided with sheer disbelief. ‘So, we could have known it. We should, in truth, even have known it’ (Gathmann 24 July). ‘They had an idea (*Ahnung*) that something was coming [...]. But they really had no idea of what then came’ (Bartsch 24 July).

One iconic image, that of sirens not sounding or not even being there, brings us back to objectification. While mud became the symbol of the floods and the suffering that followed, sirens and their silence became the symbol of what should have happened to prevent suffering. ‘Because in truth we didn't want to imagine them, there were warnings, long-term and short-term, from climatologists and meteorologists, but we didn't want to hear them. Deactivated sirens - that's a pretty apt symbol of the state of the country’ (Gathmann 24 July). Just like mud became a

symbol of the floods, the silence of the sirens became a symbol of the incompetence of politicians and of political and technological failure.

Conclusion

Our analysis of a small sample of German national flood reporting in the aftermath of the catastrophic floods of July 2021 has shown how social representations of the floods were shaped by the objectification of the floods through the poignant metonymy of mud and through personification and metaphors of natural and mechanical forces. The use of metaphors to append meaning has been observed repeatedly by analysts of previous European floods; the use of metonymy has so far been overlooked and brings a new perspective to this body of scholarly research. Looking back on such previous research, we found that metaphors seem not to have changed over the last decade or so, a time during which extreme weather events have, however, become more frequent (PreventionWeb 2021). This indicates an entrenchment of framing that could be detrimental to accessing a new ‘frame of mind’ regarding climate change and extreme weather events.

We also observed an intertwining of the floods with German election politics through metaphors and metonymies that became symbols, such as the silence of the sirens, in a context of increasing feelings of helplessness, insecurity and mistrust. Mud stuck to politicians and tainted their politics through a chain of metonymies. Silence compounded anger and the feeling of powerlessness.

The 2021 floods in West Germany were extremely powerful and overwhelming. One theme that runs through the reporting of the floods and the eyewitness quotes is that of the utter impossibility of imagining floods that happen so

fast and with such ferocity. Science may be able to predict such floods, or at least predict that they will happen with increasing frequency, but imagining such floods was impossible – they were beyond people’s imagination and understanding. The floods were powerful; the people were powerless.

To cope with the aftermath of such an event, people have to recount stories and engage in meaning-making, and stories are built on, and develop, social representations through anchoring and objectification, including metaphors and metonymies. The personification and metaphorisation of the floods as monsters, demons and killers, as an avalanche, tsunami and bulldozer perpetuated conceptualisations that scholars such as Döring and Krauss had observed before when studying media representations of the 1997 Oder flood and the 2002 Elbe flood. They had observed an interlacing of floods and politics which we also saw and here we find something novel, namely the objectification of the floods through what they leave behind: mud – in particular, mud as an implacable enemy and a destroyer of all that is personally and also politically valuable. Mud then linked the floods to the murkiness of politics and politicians and the electoral battle taking place at the time, which might have contributed to the defeat of one politician and one party in the elections that followed the floods: the mud stuck. The floods may have destroyed what was valuable to people, their homes and their environment, leaving only mud, but these same people could assert their personal and environmental values in an election where some saw the value of greener policies and less murky politics. On the whole though we detected feelings of hopelessness and helplessness in the face of the overwhelming power of nature.

It appears that metaphors have stayed the same over time, even when floods have become more extreme. This indicates that metaphors and symbols are strongly entrenched. The focus on the overpowering force of the floods and the underpowered response by politicians might impede novel thinking about climate change mitigation and adaptation; that is to say, it may lead to inaction rather than action. Similarly, the overwhelming impact not only of the floods but the mud they leave behind focuses people's concerns on what they lost and are trying to rebuild wherever possible. The loss of valuable amenities and possessions is foregrounded by the mud, rather than abstract risk to the climate exemplified by the floods. The metonymy of the mud might counteract the entrenched metaphors for floods. As a recent article by Hauser and Fleming (2021) has shown, 'floods that "strike" an area seem more dangerous than hurricanes that "make landfall" and floods that "reach" an area. Antagonist metaphors for natural disasters increase perceptions of their severity' (p. 587). We also found antagonist metaphors in our corpus but wonder whether these are enough to change people's perception of climate change risk, rather than 'just' risk to more local values and valuables. This should be taken into consideration in risk and disaster communication (see Matlock 2017).

Interestingly, we only found very few metaphors/social representations of the link between extreme weather events, such as floods and climate change in our corpus. Such extreme events are still a challenge to the imagination, a challenge exacerbated by the ferocity of the events as they unfold in the real world. This may change people's perception of future floods and also their understanding of mitigation and adaptation – how can one adapt to the unimaginable? As Bošnjak and Trišić point out in their article on the Balkan floods of 2014, the flood was often conceptualised as

a juggernaut too powerful for any mere mortal to resist. The way the floods were conceptualized highlighted almost exclusively the qualities of the floods, possibly shifting the focus, and therefore perhaps also the responsibility and the blame, from the people and their ability to resist the floods and mitigate their consequences or even prevent them to the unstoppable floods themselves.

(Bošnjak and Trišić 2015: n.p.)

In Germany too, the immediate focus on the extreme force of the floods, on the one hand, and the weakness of political response, on the other hand, may entrench feelings of helplessness and divert attention away from a more systematic and long-term engagement with flood dangers in the context of climate change, including extreme weather events. It could also prevent people from considering climate change mitigation activities. In addition, the focus on metonymic mud, rather than metaphoric flood, may prevent people to look beyond what it or was valuable to them and contemplate what might be valuable to the environment and to humanity.

Limitations and reflections

There has, so far not been any detailed analysis of the media coverage of the German flood catastrophe of 2021. Our contribution to such an enterprise only scratches the surface, as it focuses on one prominent national news provider alone – on low-hanging fruit so to speak. It would be desirable to see a more detailed analysis of local newspaper coverage of these events, especially in some of the most affected regions. Over and above this, a study of the many photos, including those of mud, taken

during the floods, should be carried out in order to preserve a detailed memory of the flooding and its aftermath (see Fekete 2022). Indeed, visual thematic analysis of images can usefully shed light on social representations of extreme weather and climate change (Nerlich and Jaspal 2014). As the readership of *Der Spiegel* is, like with all such publications, gradually aging (Schröder 2019), future research should also examine social media coverage of these events by the younger population, as platforms such as Facebook, Twitter and TikTok became significant information-sharing and emotion-sharing fora during the floods.

Despite these limitations, we believe our case study of media coverage contributes to what Alexander Fekete calls “Aufarbeitung und Erinnerungskultur” (processing and culture of memory) of the 2021 flood catastrophe (Fekete 2022: 68).

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