

AFTER THE FLOODS

Communicating Climate Change Around Extreme Weather



Flooded Oxford residents asking "Can we talk about climate change now?" in a Climate Outreach event

After the Floods

Summary

COIN has previously highlighted the worrying climate silence that has descended on the UK and the increasing political polarisation of the topic.¹ In this paper COIN outlines the opportunities that extreme weather events (EWEs), especially recent storms and flooding in the United Kingdom, offer for bringing climate change to the front of the public mind.

We recognise the potential for EWEs to open up this issue and break this silence. However, we argue, it is vital that campaigns linking flooding (or other EWEs) to climate change fully anticipate the existing complex social meanings attached to climate change, especially in impacted areas.

We conclude with a set of recommendations for climate change communicators. We argue for an approach that focuses on peer communication at a local level and recommend that any EWE linked climate campaign is thoroughly trialled and tested before being launched.

The key findings of this report are:

- Extreme Weather Events (EWEs) may help climate change feel more real and 'salient'.
- However, such events do not *automatically* lead to a greater concern about climate change. EWEs, even extreme ones, can feel natural and manageable, and people still feel free to interpret whether they are proof of climate change according to their existing attitudes and political worldview.
- The victims of EWEs have strong personal and social reasons for not wishing to accept that such events may become even stronger and more frequent.
- Communities recovering from extreme events also have strong reasons to suppress discussion of climate change during recovery.
- EWEs can generate compelling narratives of suffering, grief and blame that overwhelm the more complex narratives of climate change. Communicators need to understand these and be careful that they do not themselves become a target for people's anger.
- Communicators should validate the powerful narratives of resilience, community pride and mutual caring that often emerge during EWEs. They can build on these to create a broad-based discussion of long-term preparedness and adaptation.

George Marshall, COIN. 1st March 2014

WHY CLIMATE CHANGE IS PERSONALLY HARD TO ACCEPT

Climate change has poor salience (meaning the qualities that demand psychological attention). As is consistently reflected in polling,² people regard climate change as something that will happen in the future, far away, and, most likely, to someone else.

Climate change is uncertain. Like any complex emerging issue, climate science contains many uncertainties. This is exacerbated by the cultural caution of the science community and the tendency of many people to willingly interpret this uncertainty as a reason to avoid action.³

Climate change is technical. This makes it feel remote and unemotional. For many people the highly scientific language makes it feel like the province of the educated elite and far from their daily concerns.⁴

Climate change suffers from a weak narrative. We are strongly motivated by storylines containing standard components: identifiable characters (or archetypes), enemies with intentions, a challenge or threat, a struggle, resolution and the restitution of order.⁵ Although it contains a clear threat, climate change has complex causality and widely distributed responsibility and impacts. There is no clear enemy with an intention to do us harm, and correspondingly climate change struggles to compete with issues that offer much greater narrative clarity.

HOW EXTREME WEATHER EVENTS CAN HELP BUILD PERSONAL ACCEPTANCE OF CLIMATE CHANGE

Extreme weather events (EWEs) manifest the predictions of climate science. Climate scientists have been warning for over 20 years that increased greenhouse gas levels would lead to more intense and frequent extreme weather events. The flooding, heavy rainfall and storms of December 2013 and January 2014 were consistent with the predictions of the UK Climate Impacts Programme for changes to winter weather.⁶ Despite the many uncertainties about the causality of individual events, scientists increasingly acknowledge that there is a global pattern of EWEs consistent with their understanding of climate change.⁷

EWEs provide a 'signal value'. Research into the social perception of risk recognises that individual events creates a forewarning 'signal' that makes the possibility of future disasters feel real and imaginable.⁸ Narrative theory also recognises the importance of early 'foreshadowing' in highlighting key themes that will later develop into a narrative.⁹

EWEs offer many of the narrative qualities that climate change lacks. They are local and immediate. They offer personal experience and real life stories that mobilise our empathy. They have an innately high salience, demanding attention through graphic images that are constantly repeated through the news media.

EWEs speak to real experience. EWEs draw on everyone's personal experience. They are therefore a highly democratic form of experience, based in common emotions of loss and thankfulness, that can cut through the educational elitism of expert driven science and policy.

EWEs are certain. Because they are based in real time, real life experience they are highly tangible and authentic. Even if their interpretation as climate change is difficult, they are, beyond debate, real and incontestable events.

EWEs become 'available' experience. Cognitive psychology experiments show that people often base their decisions on the most recent or salient experience available to them.¹⁰ This 'availability bias' leads people to focus attention on issues that, like climate change, might otherwise be disregarded as uncertain or improbable. The 2001 and 2005 terrorist attacks in the US and UK, for example, established the highest political and public priority for threats of very high uncertainty.

THERE IS SOME EVIDENCE THAT EWEs CAN LEAD TO INCREASED AWARENESS OF CLIMATE CHANGE.

Research in Britain found that people affected by flooding expressed higher levels of climate concern and a greater willingness to reduce their carbon footprints.¹¹ Welsh citizens living in a recently flooded area were 10% more likely to agree that the impacts of climate change were already being felt.¹²

Surveys in America have found that between 60% and 72% of people agree that "global warming has made extreme weather worse". The highest agreement was, not surprisingly, for the heat wave of 2011 and the warm winter of 2010-11.¹³ People in areas with rising average temperature were more inclined to accept global warming than those with more stable temperatures.¹⁴ An analysis of attitudes over 20 years found that, for every degree that temperature rose above the average over the previous 12 months, there was a 7.6 per cent increase in agreement that the world was warming.¹⁵

However - the problem with surveys is that they rarely show how strongly people associate climate change with EWEs. Many surveys ask people questions about extreme weather and then ask them about climate change. When they do this, they encourage people to make this association – a survey weakness called ‘priming’. What is still poorly tested – and merits more research – is whether people make that connection freely without such prompting, and, especially, whether they discuss such a connection with the people around them.

PEOPLE INTERPRET EWEs THROUGH THE LENS OF THEIR EXISTING ATTITUDES AND WORLDVIEW

People interpret EWEs in the light of their existing attitudes to climate change. Research into British attitudes to extreme cold weather events found that most climate sceptics see them as proof that global warming is not happening and that most climate believers see them as evidence that climate change “may now be a reality”.¹⁶ Neither position follows directly from the predictions of climate science, and both are drawn from people’s pre-existing assumptions.

In two recent British polls from January 2013 and November 2013 people were split about whether “we are seeing the effects of man-made climate change in recent extreme weather”. 40% said yes. 39% said no.¹⁷ This split followed the same age, gender, and political divides as the split between those holding views for and against climate change as a whole.¹⁸

People’s attitude to climate change may influence whether they define a weather event as being “extreme” at all. For example, farmers in Illinois invited to report their recent experiences of the weather, emphasised or played down extreme events depending on whether or not they accepted climate change.¹⁹

Political orientation is a major influence on people’s interpretation of EWEs. In the UK, Labour and Liberal Democrat voters are twice as likely to agree that EWEs are linked to climate change than Conservative or UKIP voters.²⁰ The people most likely to have their views formed by the weather (even, in one US study, the temperature on the day of the poll) are political Independents.²¹

EWEs are more open to this kind of personal interpretation than other major threats. The research into risk perception shows that people are far more tolerant of risk from ‘natural hazards’ (such as EWEs) than from human attack (terrorism) or technology (nuclear threats). Professor Paul Slovic, the leading expert in the social construction of risk,

argues that this helps explain why the uncertainty of future terrorist attacks creates fear and anticipation, whereas the uncertainty of EWEs and climate change can generate complacency or disbelief. Slovic also argues that the perception of EWEs as a 'natural hazard' leads us to recover and forget them more rapidly.²²

PEOPLE'S CONCERN ABOUT EWEs AND SENSE OF THREAT MAY BE HARD TO MAINTAIN

People's concern about EWEs (and any association with climate change) lapses rapidly without a recurrence. The 'availability' of a traumatic EWE event raises concern, but the strength of this memory can fall rapidly as the event becomes more distant. Immediately after a major flood, many more people buy flood insurance, but, on average, they let it lapse after two to four years if they have not suffered a claim.²³ Hurricane Katrina generated a brief increase in US public concern about climate change in 2005 but this started falling a year later. Concern across the world followed a similar pattern suggesting that even the influence of this exceptional EWE could not counteract outside effects – in particular growing concerns about economic uncertainty.²⁴

People may come to accept regular and worsening EWEs. Humans have an extraordinary capacity to adapt to and accept new and worsening conditions. Because of the bias of availability we measure the status quo from experience of recent events. If recent events have been hotter and wetter then we take this to be the 'new normal' and we will need even greater extremes to alert our sense of threat. This process of habituation, named shifting baseline syndrome, is a recognised obstacle to building awareness of environmental degradation.²⁵

AFTER AN EWE THE DIRECT VICTIMS MAY NOT EXPRESS GREATER CONCERN ABOUT CLIMATE CHANGE THAN THOSE WHO ONLY EXPERIENCED IT THROUGH NEWS MEDIA

We might expect that the direct victims of an EWE would have a significantly higher level of concern about climate change than non-victims. However, this is not necessarily the case. A study of flooding in England, one of the few to explore this question, found that victims of flooding were no more likely to list flooding as a future impact of climate change than non-victims, and were less likely to say that those impacts would be 'catastrophic'.²⁶

EWE survivors may choose to believe that further EWEs are now less likely to affect them. People who survive EWEs, like people who escape car accidents unscathed, are prone to have a false sense of their own future invulnerability.²⁷ A study of a town in Iowa that had been hit by a Force 2 hurricane found that many people argued that they were now less likely to be affected by a future hurricane than other towns. The people in the areas that had suffered the most damage were the most optimistic.²⁸ Following extreme floods in 2012 in Queensland, Australia, few people made any changes to reduce their vulnerability to flood and many residents spent their disaster relief or insurance premiums on general home improvements and installing new kitchens.²⁹ Such responses are unlikely to lead to increased concern about climate change.

Recovering areas show a socially generated silence about climate change. In 2012 and 2013 COIN conducted over 20 interviews in Bastrop Texas and New Jersey with the victims of drought induced wildfires and Hurricane Sandy.³⁰ No interviewee mentioned climate change as a potential cause of the EWE until they were prompted to do so. Not one person could recall a single instance when they had discussed climate change in relation to their EWE experience, even those who accepted that they may have been associated. Local newspapers and politicians of both parties deliberately refused to explore the connection in public and said that it was not appropriate to do so.

We suggest that this silence may emerge from two causes. Firstly, that people are unwilling to broach a potentially divisive subject that might threaten social consensus at a time of strong social cooperation. Secondly, that people are personally unwilling to anticipate future disasters when they are recovering from trauma and investing in reconstruction. There are, therefore, both collective and personal reasons to frame an EWE as an exceptional one-off event and to suppress any evidence that this event might return in an even more damaging form.

There is, as yet, little research in this area, and we highlight it to emphasise that there are major uncertainties (and potential pitfalls) in communicating climate change in areas that are recovering from the trauma of a recent EWE. Such areas may require a carefully tailored and well tested approach.

EWE AND CLIMATE CHANGE NARRATIVES – COHERENCE AND COMPETITION

People interpret climate change and EWEs in the form of socially formed and transmitted narratives. Therefore, EWEs will only lead to increased concern about climate change if both narratives are coherent, mutually reinforcing and socially transmitted. This may not be the case, and the experience of the recent British floods suggests that climate change narratives of long-term shared responsibility struggle to be heard over the more compelling EWE narratives of short term suffering, heroism and blame.

Compelling but inaccurate narratives can overwhelm weaker but more accurate narratives. There is strong research evidence that narratives are very important for attitude formation and that attitudes are often determined more by the completeness and ‘fidelity’ of the narrative than its grounding in scientific accuracy.^{31 32} This is especially true if compelling narratives are widely shared between peers.

Climate change narratives, especially those created by scientists, emphasise uncertainty. It is never possible to establish an unequivocal connection between climate change and any individual EWE. Scientists have been prone, in response to sceptic attacks, to become more defensive and to emphasise what is not known (the basis of their research) over what is known (the basis of public communications). Scientists therefore present a very weak narrative of causality that is constantly undermined further by the language of uncertainty.

Climate change may not be mentioned at all. There are, as suggested above, numerous reasons why politicians and the news media may decide that it is inappropriate to discuss climate change. When the Prime Minister suggested, tentatively, that he “very much suspects” that the flooding was linked to climate change he was shouted down in the House of Commons by his own side and has made no further comment.³³ According to the monitoring organisation Carbon Brief, up until mid February less than 7% of the stories about the floods in the UK print media mentioned climate change.³⁴

EWE narratives can rapidly turn to short term blame. The most emotionally compelling narratives are those containing recognisable enemies with a clear intention to cause us harm. Enemy and blame narratives can easily overwhelm arguments concerning complex long term causes. For example, during large scale wildfires a media driven hunt for arsonists often overwhelms more complex arguments that the fires were caused by poor forest management or climate change induced drought.³⁵

Emotionally charged EWEs tend to generate strong blame narratives - especially blame for government negligence (as happened around Hurricane Katrina) or, after the event, blame for insurance company failure to settle claims. In the case of the British floods of 2013-14, the media narratives of resilience and 'blitz spirit' rapidly moved to language about blame, especially very visible public anger against the government for its supposedly inadequate preparation and response. Much of the anger focused on the Environment Agency - the agency concerned with the flood response - accusing it of greed and incompetence.

Blame can readily become focused on environmentalists. There is a common psychological defence to blame the messenger, especially when people feel that they are being made personally responsible, and there is a danger that anxiety about EWEs could become focused on the people who communicate climate change.

US wildfires are consistently blamed by conservatives on environmentalists for restricting the clearance of forest undergrowth.³⁶ British coverage of flooding was focused on the 'Environment' agency and its head, the former environment minister Chris Smith. Resentment also focused on the supposed failure, on ecological grounds, to adequately dredge rivers - epitomised in a high profile article in the Daily Mail by the prominent climate denier Christopher Booker, headed 'It's the deluded greens who've left my Somerset neighbours 10ft under water'.³⁷

During the second week of February the Daily Mail, a consistently (though not exclusively) climate sceptic newspaper took the environmental enemy narrative one step further by launching a petition to redirect foreign aid towards UK flood victims. The primary focus was the £2.9 billion supposedly pledged to cope with climate change impacts abroad. Far from accepting the link between climate change and flooding, environmentalists had somehow become blamed for it.

THE COMPETING NARRATIVES OF EXTREME WEATHER EVENTS AND CLIMATE CHANGE

By February 2014 the compelling narratives of suffering and blame were dominating all media discussion of the winter storms and floods. These followed familiar ideological lines, usually focusing on the struggle between individuals and a government bureaucracy. On February 9th, the UK Meteorological Office launched a major report detailing the relationship between global climate change and the record breaking storms, rainfall and flooding of December 2013 and January 2014.³⁸ This was the first major news 'hook' that could open up coverage of the connection between climate change and the weather events.

Although the news media duly reported it the following day, the report struggled (and largely failed) to communicate a complex narrative of global responsibility phrased with scientific caution amidst the more compelling and emotional narratives of blame. These were also uncertain and unproven but, unlike the science, were presented with an undue confidence as socially agreed facts.

This page, from The Sun: 10th February 2014



NARRATIVE - BLAME

The Environment Agency wastes money on vanity projects, overpays its executives, and does not protect people.

The key hate figure is former Environment Minister Chris Smith

NARRATIVE - PROTECTION AND DEFENSE OF OUR INTERESTS

The government should stop wasting money on foreign aid and 'put our own struggling country first' says UKIP leader Nigel Farage. This narrative led the Daily Mail to launch a petition demanding that contributions to international climate change disaster funding be directed to UK victims

NARRATIVE - CLIMATE CHANGE

Climate change 'almost certainly,' lies behind the recent storms says the UK Met Office although there is "not yet definitive proof".

NARRATIVE- VICTIM/BLAME

A boy of seven who died in the floods was 'let down by the system'.

LESSONS FOR COMMUNICATORS

Jim Hansen, the former NASA climate scientist, once said that increasing EWEs must lead to greater acceptance of climate science because “it is hard to persuade people that they have lying eyes”.³⁹ Unfortunately the large literature on the psychology of perception and social conformity shows that people have an extraordinary capacity to interpret what they see in the light of their existing and socially formed assumptions.

The relationship between EWEs and public attitudes to climate change is complex.

These connections are mediated by cultural values narratives and so are readily polluted by existing animosities, divides and resentments within an emotionally charged atmosphere of trauma and blame.

Communicators must be alert to their own bias. The connection between EWEs and climate change is complex and uncertain and is therefore very prone to being read according to personal bias. Communicators and campaigners who are strongly convinced of the issue are also prone to bias and should never assume that any connection that is ‘obvious’ to them will be understood that way by others.

Making overblown statements about causality can discredit the authority of the communicator. Connections are hard to make. Globally 2012 had the lowest number of natural disasters in ten years with a third of the average number of disasters and only ten per cent of the fatalities. Superstorm Sandy, in spite of its strength and size, killed only 159 people in the United States.⁴⁰ Nonetheless Al Gore called 2012 “a nature hike through the Book of Revelation on the news every day”.⁴¹ Such language looks like hyperbole and will not be supported by legitimate scientists.

If EWEs do not repeat soon, or are contradicted by contrary weather, campaign rhetoric can be cited as evidence that the communicator is biased or self serving. In the Aesop’s fable of the ‘boy who cried wolf’, the boy was right: there were wolves and they did pose a major threat. However, his excessive and ill-timed repetition discredited him as a communicator.

Ill-designed messaging could reinforce and widen existing divides. Climate change attitudes, especially surrounding links with EWEs, are strongly coded with cultural cues. Arguments that are seen to belong to environmentalists, or reflect a left/liberal worldview, will encourage their opponents to form and then share contrary views.

Campaign organisations should resist the temptation to do public facing messaging around EWEs that only speak to their own constituency. If these only speak to the values of a limited audience they will be likely to alienate other audiences and will create strong and lasting frames that will pollute communication around future EWEs.

There is a strong danger that messaging could backfire. People are angry, upset, and looking for someone to blame. This is a difficult audience for communicating bad news. Communicators need to be especially alert to any perception that they are exploiting the suffering of others for their own ideological goals.

The evidence of EWEs might make climate change more real, but it also makes climate change denial more appealing. Climate communication always struggles with how much it should try to scare people knowing that this might motivate them, but that it might also lead them into denial. This is especially true of EWEs which are genuinely frightening. Victims, especially those who have invested their savings into rebuilding, will have strong reasons for rejecting such messaging.

Personal acceptance of a connection between EWEs and climate change does not necessarily lead people to support global action to reduce emissions. There are other potential psychological responses, well supported by the literature, that include disavowal, cynicism, despair, nihilism, short term materialism, psychological numbing, indifference, and self interested protection.⁴² These responses need to be fully anticipated and reflected in messaging.

Work steadily for the long term. We can assume that EWEs will continue to build in frequency and severity, providing plentiful future opportunities to build a strong social consensus and acceptance around EWEs and climate change. Even though we are short of time, we can still tread carefully, learn as we go, and avoid introducing divisive frames.

TOWARDS EFFECTIVE COMMUNICATION

Even if challenging, EWEs still offer a vitally important opportunity to build awareness and conviction around climate change. The fact that this is hard does not mean that it should not be done - but rather that it must be done well. The following are some guidelines for good practice, but our overarching recommendation is that any approach should be carefully tested and evaluated.

Consensus on adaptation and preparation can occur ahead of consensus on climate change. Although some people deny that there is any change occurring in the climate, they are in a small minority. Most people accept that changes are underway but are unwilling to accept the role of human emissions. It therefore makes sense to start with this common ground. The aggressively climate denying legislatures of the US states of Florida and Arizona for example are incorporating the latest models of climate impacts into their long term planning whilst officially refusing to recognise the science that they are built on.⁴³

Enable and create fora for local decision making. Discussion of long term planning and adaptation cannot happen in a vacuum - it requires that there be fora and processes for policy formation and implementation.

Create different roles for different communicators:

a) Peer communicators. A responsive strategy for EWE communication would start by identifying and supporting peer communicators. Peer communicators are most important. They are trusted communicators representing locality, common values, and mutual interest. They can utilise the personal stories that are so important for creating a compelling narrative.

b) Experts provide information to support local needs. Experts, especially scientists, have an important role in providing the science that can inform and guide local decisions.

c) A split role: Experts provide data and information - peer communicators provide personal conviction. Action can be permanently disabled by an arid debate about expert certainties/uncertainty. Although the background science can be presented in these terms, the association between climate change and EWEs can be better presented by communicators as a personal conviction: that personally they have heard enough (and experienced enough during the EWE) to become convinced. This reflects the well understood mechanisms by which information becomes converted into socially held attitudes formed through social norms and peer communicators.⁴⁴

d) Outside organisations. Outside organisations, especially environmentalists, need to maintain a low profile within local discussions and only be present amongst a broad diversity of views - ideally including equal representation from conservative, working class, or BME participants. A major role for outside organisations could be enabling and supporting local discussion - for example enabling fora for preparedness planning or providing access to the expert research that could inform local decisions.

TOWARDS EFFECTIVE NARRATIVES

Testing is critical. Because people interpret the weather through the lens of their own assumptions and values, climate campaigners are likely to misjudge how any message will work with other audiences. Messages for communicating EWEs need to be developed and thoroughly tested with a wide range of audiences with different values.

Breaking the silence. As noted above, strong social forces in communities damaged by EWEs can create a socially enforced silence around climate change. Communicators need to deliberately (but sensitively) challenge this collective silence, and ensure that long-term climate change impacts are included in local decisions.

Different narratives for different audiences. There is no single correct way to talk about EWEs and climate change – there needs to be a diversity of narratives, and people with different values and worldviews should be encouraged to develop their own language. COIN suggests four narratives that could speak to new and sceptical audiences and complement other more conventional climate change narratives.

Sharing and common identity. EWEs bring out an unusually strong sense of collective purpose, loss, caring and altruism. Talking to shared experience and values builds bridges over the political differences that divide people on climate change. There is research evidence that triggering these caring values - often called ‘intrinsic’ values - also stimulates an increased willingness to protect the environment.⁴⁵ Such narratives might celebrate how well people pulled together, recognise shared loss and suggest preparedness and collective strategies to protect old or vulnerable members of the community rather than personal property.

Localism. COIN’s 2013 report on communicating climate change to people with centre-right politics argues that values of shared responsibility for the stewardship of the countryside and local environment are “embedded deeply at the heart of traditional conservatism”.⁴⁶ In order to be effective and sincere, these values need to be built into narratives and then communicated by people who share these conservative values and understand the exact language and images that frame them.

Just world narratives. People who hold a ‘just world’ view believe in personal rewards for personal achievement and strong punishment for transgressions. They accordingly believe that bad events do not occur at random but “are the results of some prior bad act”.⁴⁷ A narrative, that explains the link between EWEs and climate change within such a just world

view may be a way to speak to an audience that is often conservative and doubtful of climate change. Again, such messages must be presented by people who share this world view and understand its frames.

Contravention of the usual. A widely held narrative - that emerges strongly in focus groups - is that EWEs are a symbol that things are not 'right' with the weather.⁴⁸ Language can explore ideas that climate change is about weird or disrupted weather - a 'contravention of the natural'- that draws attention to the ways that recent EWEs deviate from previous 'normal' experience.

NARRATIVES BEST AVOIDED

Global apocalypse. Excessive claims of imminent disaster rarely work except for people who already hold them. They are even less likely to work for audiences recovering from the trauma and damage of an EWE.

'I told you so'. Climate change campaigners may be tempted to remind people that EWEs are the climate future that they have been warning about for years. Such an approach is unlikely to be effective, will emphasise the polarisation around the issue and may fuel the narrative (already widespread) that they are enjoying the moment and exploiting people's suffering.

Blame. As argued above, blame narratives can readily attach themselves to EWEs and, once introduced, will seek out the most compelling and familiar targets. Blame is divisive and breaks down the language of common identity and purpose.

Gambles. Gambling metaphors are common in climate change communications - especially Russian Roulette and loaded dice. They are always problematic as they suggest a framing around winners, losers and personal advantage. People are already taking decisions in response to EWEs that contain a strong gamble on future recurrence, and framing the issue as a gamble will encourage them to make ill-informed bets.

ENDNOTES

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