

# Conflicted calculation: emotion and natural hazard risk

Rebecca Elliott discusses the emotional contours of risk

Tina choked up as she explained that her home in Broad Channel, Queens, had been 'remapped' into a higher risk flood zone on New York City's recently updated flood maps. As a result, her flood insurance would become so expensive that she might not be able to keep the house unless she found the money to elevate it. Faced with this new, two-part calculation of risk and its price, she was torn. On the one hand, she knew the risk was worse: 'Living on the water, we saw the change.' On the other, she couldn't bear the thought that the neighbourhood where she had lived her whole life and raised her children might be too risky and too expensive for her and her family to stay. And if she elevated her home now, would it be enough when the flood maps were updated next?

Zygmunt Baumann (1991) told us that ambivalence is an irrepressible feature of modern life. Our 'drives to order' – expressed in our preoccupation with design, management, engineering, and calculation – paradoxically seem to generate opacity, confusion, and helplessness, increasingly borne as an individual problem. Ulrich Beck (1994: 12) took up this idea, connecting it to a characterization of the emotional tenor of risk society, in which we are alienated, anxious, 'living and

acting in uncertainty'. The more we do to represent environmental and other dangers as risk, as a way to exert control over them, the less secure we feel.

In my research, these broad characterizations provide a provocation to examine the emotional experience of living at risk empirically. I focus on New York City at a moment when residents like Tina, along with public officials and civil society actors, confronted a new landscape of risk and its price, calculated and represented on maps used to set the price of flood insurance. What are the emotional contours of risk and why might they matter for how we understand human experiences of natural hazard risk in particular?

I share this interest with a number of researchers who recognize that risk is a problem of feeling. Coming largely out of various subfields of psychology, these studies complicate theories of cognitive reasoning, showing that negative and positive feelings, whether conscious or unconscious, provide affective heuristics – 'mental shortcuts' that shape how people identify and respond to risk. This intervention has been applied to some research on natural hazard risks, like flooding, that has demonstrated the relevance of emotion. For instance, the work of Tim Harries (2008, 2012) on flood risk in the UK

has shown that feelings of anxiety and insecurity can overwhelm material and financial considerations when deciding whether to undertake protective action. In the context of flood and other natural hazard risks, emotion is generally conceptualized as a problem of individual decision-making under risk, helping to explain the persistent puzzle of why many people who face such risks do not take steps to avoid or mitigate them.

My research builds a sociological approach to the question that engages a set of interrelated blind spots in this existing literature, revealed through my interviews and ethnographic observation in New York City. The first is that emotion remains confined to individual experiences and sensitivities, without being robustly connected to the social processes that structure how that risk is experienced – processes named but not empirically scrutinized by Baumann and Beck. In New York City, the relevant social process is calculation (of flood risk and its price), which elicits a set of shared dilemmas related to felt tensions between attachment to place, fairness, security, and resilience. In drawing boundaries around risk zones, the flood maps group people together who all have to come to terms with new calculations of risk and its price. The second shortcoming of earlier studies is that the only individuals who seem to matter are

the homeowners at risk, typified as 'emotional' in contrast to 'analytical' or 'rational' experts. Yet the representation of and response to risk is a collective enterprise that implicates many different actors who, significantly, *interact* with each other: engineers, local administrators, elected officials, lawyers, and insurance professionals, in the case of flood risk. As Deborah Lupton (2013: 638) notes, emotions are 'not simply or only personal, individualised experiences but may also be shared between people, circulating between bodies'. I found that through interaction with each other and with the non-human 'risk artefact' (Power 2016) of the flood map, these expert actors became emotionally involved in the dilemmas of New York City homeowners like Tina, leading them to perceive and articulate larger public policy contradictions in the risk management of flood.

Thirdly, the focus on explaining decision-making presumes both that a decision can be made and that the relevant decision is whether or not to protect against risk, which is itself often taken for granted as objectively real. But risks are constructed realities and the emotions they generate are bound up with their construction. Whether people feel anxiety, confusion, loss – or conversely, clarity and confidence to act – depends on, for instance, whether risks are defined as individual or shared, how 'near'

or 'far' expected harms are anticipated to be, and how risks are communicated visually and/or economized insurantiably. Risk representations, like flood maps and insurance premiums, require people to contemplate uncertain physical, financial, and social futures, potentially generating responses addressed not to the risk itself, but instead to its construction. In New York City, the new maps and insurance prices were 'scarier than another storm', in the words of one Rockaway, Queens homeowner. Residents who had and had not undertaken protection banded together to fight the flood maps, their interest in protecting property values co-mingling with an emotional imperative to defend their homes and communities.

Taken together, I describe the findings in New York City as evidence of what I call 'conflicted calculation'. Facing new calculations of flood risk and its price, New Yorkers – those subject to them and those enforcing them – felt pulled in different directions, discomfited by the available options, and uncertain about how to interpret and respond to the representation of risk provided in the maps. I argue that this concept has a broader heuristic value too, helping us to better understand the relationship between emotion and natural hazard risk and its significance. It recovers the social processes and mechanisms that connect modern political and

cultural commitments to risk management – Baumann's drives to order – with feeling states experienced on the ground. 'Conflicted calculation' also helps to observe more clearly the challenges facing communities coming to terms with their own vulnerability, as risk technologies and rationales impose new definitions and demands on treasured places.

## References

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