"That's where I first saw the water…": mobilizing children's voices in UK flood risk management

Alison Lloyd Williams, Amanda Bingley, Marion Walker and Maggie Mort, *Lancaster University* and Virginia Howells, *Save the Children UK*

Abstract

This paper reports from a project, led jointly by Lancaster University and Save the Children UK, that used mobile, creative and performance-based methods to understand children's experiences and perceptions of the 2013/14 UK winter floods and to promote their voices in flood risk management. We argue that our action-based methodology situated the children as "flood actors" by focusing on their sensory experience of the floods and thus their embodied knowledge and expertise. The research activities of walking, talking, and taking photographs around the flooded landscape, as well as model-making and the use of theatre and performance, helped to "mobilize" the children, not only to recall what they did during the floods but also to identify and communicate to policymakers and practitioners how we can all do things differently before, during and after flooding.

Keywords: England, flooding, landscape, materiality, memory, imagination, mobilization, performance

Flooding is recognized as the UK's most serious "natural" hazard,[1] and according to the Intergovernmental Panel on Climate Change we can expect more severe flooding over the coming years.[2] Children are therefore highly likely to experience flooding in the future,

making it imperative that we understand how they are affected so that practice and policy can develop in ways that take account of both their needs and their contributions to resilience building, thus reducing the impact of future emergencies.[3] However, while it is recognized that those who have experienced a disaster bring a crucial expertise to disaster management and recovery,[4] children are still overlooked within and beyond the UK with regard to understanding community capability.[5] Where children do appear, they tend to be configured solely in terms of vulnerability.[6] Nikku goes as far as suggesting that "Children are the most photographed but least consulted while making disaster management policies and programs."[7] This "victim" construction defines children as acted upon, rather than acting, in disasters and excludes them from discussions about how societies might respond differently to emergencies.

This paper draws on research conducted for the Lancaster University and Save the Children project, "Children, Young People and Flooding: Recovery and Resilience" (2014-16) to argue that children can mobilize and become mobilized by mobile and performance-based methods, positioning them as "flood actors." Through an emphasis on the sensing, material body, we suggest that these approaches can support children to recall and reflect on their experiences of disaster and, further, help them to lobby for changes in policy and practice. In making this case we draw on the interdisciplines of disaster studies, mobilities studies, performance and childhood studies. We conclude that these methods help children's voices to "travel," supporting them to become change agents in disaster planning.

Mobile and performance-based methods in disaster studies

Disasters are inherently mobile processes, centred on uncertainty, disorder and change. Working with the United Nations definition of disaster detailed in "Living with risk" allows us to consider the physical, social and spatial dimensions of disaster and the dynamic and

complex way these dimensions intersect in relation to embodied human experience.[8] Our interest in the children's lived experiences of flooding draws particularly on the interest in mobilities studies in "the corporeal body as an affective vehicle through which we sense place and movement, and construct emotional geographies."[9] Indeed, Doughty and Murray note that work on mobilities that "takes the body seriously" marks "a shift towards the 'beings and doings' of mobilities,"[10] reflected in our aim to understand the "beings and doings" of the children's flood experiences. This emphasis on the material, movement and action also leads many mobilities theorists to draw on concepts of performance and performativity as a way of analyzing the "complex relationality of places and persons" in ways that are useful for our project, which was interested in the children's role as flood "actors."[11] As Christensen and Cortés-Morales suggest, "The role of mobility in society is now seen as constituting the process through which social relations are made (or unmade), maintained, and performed."[12] Stalter-Pace also points out that notions of mobility and performance both "decenter the dependence on fixed places and states of being, replacing it with a critical focus on the ways that human culture plays out though space as well as time."[13] By bringing together theories of disaster, mobility and performance, we draw attention to how children "act" during flooding and, further, how they can "act" as mobilizers for change within their societies.

Our interest in children's role as "flood actors" required an approach that would help discover how children act in relation to flooding and this involved walking, "phototalk," 3D model-making and theatre. Research into the mobile experience of a disaster invites the use of methods that are also "on the move,"[14] and, as such, our research builds on the increasing body of literature exploring the role of mobile methods in research.[15] We also needed to use methods that were "youth friendly," providing a "safe" way for children to access sometimes painful memories and articulate traumatic experiences.[16]

In their analysis of how walking "evokes and invokes," O'Neill and Hubbard argue that "performative, visual and qualitative methods" are useful in seeking to understand the "embodied tactics, spatial practices and modes of expression with which to explore textures of place,"[17] suggesting such methods can help to "access a richer understanding of the complexities of lived experience" including "those… that are hard to put into words."[18] For O'Neill, walking is a performative act that "enables relational work to be undertaken that involves the performing, sensing body."[19] Thus walking can become, as Anderson suggests, a way to "trigger memory"[20] and a stimulus to other tactile, expressive methods that explore "spatial non-verbal relationships, such as those between space, place and the individual."[21] This approach is resonant with Mitchell and Elwood's description in their discussion of children's research that draws on the principles of nonrepresentational theory (NRT) (an approach that they describe as emphasising the flow and movement of practices of enquiry).[22] This suits an ethnographic design that encourages a focus on active participatory processes and practices rather than, as they explain, on the structural elements (i.e. words, transcripts) that come to represent the practices and spaces of interaction.

As an embodied and intersubjective practice, theatre also focuses powerfully on experience and perception. In relation to disasters, it can therefore be a useful tool for exploring what Nicholson calls the "politics of (dis)location,"[23] bringing different experiences and forms of knowledge into dialogue and thereby highlighting some of the complex, intersecting aspects of disaster affecting survivors.[24] We framed our research workshops with theatre-based games and exercises, creating imaginative spaces that encouraged the children to play with different versions of events and construct alternatives. This approach invited the children to see themselves as "flood actors" and experiment with different modes of "being and doing" in ways that point to the possibility of change.

In this way we drew on Büscher and Urry's suggestion that "inquiries on the move" can become "inquiries from within."[25] Büscher and Urry argue that the "immersive and at the same time analytical momentum" of mobile methods enable researchers to "critically engage with the people and matters they study in novel and highly effective ways, and to orient critically towards the future, not only the past," thereby connecting the research to practice in an interventionist way.[26] Our approach played with different kinds of mobility and performance - past and future actions, the lived and the imagined - creating not just the possibility for children to explore their own actions during the flood but also to support them in identifying other actions that they and others could take in the future. As Büscher and Urry suggest, this approach points to ways of "fold[ing] empirical analysis into social and material change."[27]

Children's agency as flood actors

This interventionist aim to support children as flood actors, or mobilizers for change, raises important questions around children's agency. Prout has argued that "[b]y emphasizing children as beings "in their own right", work in the field of childhood studies, "risks endorsing the myth of the autonomous and independent person, as if it were possible to be human without belonging to a complex web of interdependencies."[28] He notes that "[t]he agency of children as actors is often glossed over, taken to be an essential, virtually unmediated characteristic of humans that does not require much explanation."[29] Researchers of children's mobilities have built on Prout's analysis of agency to promote a more "relational" view of children's mobile practices,[30] and note that "what is needed is an account of how children are able to exercise agency through their networks and alliances with other actors."[31] Working with a mobilities and performative lens, our research builds on Prout's notion of children's bodies as "hybrid entities"[32] by examining how children "act" in a

disaster, and the possibilities and constraints they face.

This relational analysis of agency also opens up the possibility of exploring children's role as actors within the broader spaces of emergency policy and practice, as called for by those working in children's mobilities. For example, in his analysis of young people's participation in transport planning, Barker draws on scale theory to demonstrate how children's involvement in local campaigns led to an influence on national policy.[33] Doughty and Murray call for "mobilities research to analyse both wider structures of governance and experiences of mobility and thus examin[e] the relationship between broader institutional discourses of mobility and 'everyday' embodied accounts of mobile lives."[34] Most current work within children's mobilities focuses, as this quotation indicate, on children's "everyday mobilities."[35] Building on this, we argue for the need to look at children's mobilities in the *non-everyday* circumstance of disaster, bringing their experiences and voices to the attention of policy and practice and thereby making these more sensitive to children's needs and capacities.

Kraftl notes particular qualities and limits to the nature and extent of children's agency and voice that need acknowledgement, particularly when presenting participatory research with children. In particular, he argues against what he calls "a tendency" in children's emotional geographies "to deploy children's emotions somewhat instrumentally in support of voice and/or agency.[36] Like Prout, Kraftl is interested in relationality and questions notions of independent mobility. He argues that "visual and performative methods of participatory research" are more "inclusive," whereby "participatory research becomes an *expressive*, rather than *instrumentally representational/representative*, form of knowledge production."[37] By supporting children to articulate their flood experiences in their own way through a range of expressive means, our project builds on the work of Beazley who, in her work with children affected by the 2004 tsunami in South East Asia, responds to Kraftl's call to " 'go

beyond' the usual arguments of voice and agency" and also to Horton and Kraftl's assertion that policy-led research should use creative research methods "to generate data about children's emotional geographies from the child's perspective."[38]

At the same time, as Kraftl also reiterates,[39] we acknowledge there is always a delicate balance to maintain between facilitating children's voice and agency and taking responsibility as adults to afford children appropriate protection. For instance, as Philo argues, there are necessary limits to a child's voice and agency, which are important in protecting children from being asked to share an inappropriate voice[40] and, we argue, ensure that children are sensitively and ethically protected when given a chance to voice their ideas and thoughts. Thus, we recognize that our team of adult researchers defined the fieldwork and supported the children to take part and we acknowledge that the project was necessarily only partly child-led. Mitchell and Elwood in their exploration of children's research from the perspective of NRT indicate this can be a positive process, actively enabling the reclaiming and provision of safe spaces that take into account the vulnerabilities of children, while still giving opportunities for children's participation and articulation in social and political contexts.[41]

Children and disasters

Lopez et al. note that evolving notions of childhood have affected understandings of children's participation, agency, and rights with implications for the way children are conceived in relation to disasters.[42] Haynes and Tanner agree that a growing body of empirical research and practice challenges the perception of children as merely "passive victims" of disasters by proposing instead that children are active in disasters and potential agents for change in their society.[43] In particular, there has been a limited range of work with children with regard to disaster risk reduction and communication.[44] Indeed, the United Nation's 2015 Sendai Framework for Disaster Risk Reduction (DRR) specifically outlines a

role for children and youth as "agents of change," noting that they "should be given the space and modalities to contribute to disaster risk reduction."[45]

Various authors have documented recent DRR work involving children, which draws on creative and participatory methods.[46]As Mitchell et al. note, such work such shows that, when given the opportunity, children can see themselves as mobilizers and are able to take action.[47] However, several authors conclude that there remains a lack of child participation in practice,[48] in particular as a result of the "prevailing understanding of policy makers" which fails to conceive children as "protagonists, seeking and generating internal and external policy spaces, linking with adults in a horizontal dialogue on risks and priorities."[49] This analysis of children as protagonists in disaster policymaking reflects our project's aim to challenge the social exclusion of children in disasters and position children as flood actors on a national, policy stage. In this way, we adopted what Cook and Butz call a "social justice praxis" in our use of mobile and performance-based methods with children affected by disaster. This, Cook and Butz suggest, "fosters people's motility and access to mobility options, thereby nurturing their social agency and personal imaginaries, potentials, and futures, as well as democratic social systems."[50] It supports, as we argue, a role for children as mobilizers for change within disaster policy and practice.

Performing flood mobilities: the workshop process

We worked with two groups of 15 flood-affected children: one was from a rural North Lincolnshire primary school, affected by flooding from a tidal surge that breached the banks of the River Humber in December 2013; the other was from an urban secondary school in Staines-upon-Thames, Surrey, which experienced a cluster of flooding events, involving tidal, rainfall, river and groundwater sources in February 2014. We held three day-long creative workshops over the course of an academic year, followed by public, performance-based

events in which the children presented their experiences and ideas for change to audiences of policymakers and practitioners involved in flood risk management.

Key to our approach was the creation of a safe environment in which the children could gain confidence in sharing their experiences - a space in which they could "play" and, through this, access memories and ideas. We therefore started each workshop with theatre-based games and exercises, signalling that the workshops would be fun and participatory, literally getting everyone moving and setting the tone for action. This was also a way of inviting creativity and imagination and finding ways to build trust in working together. Helping them build their capacities to speak out and act within the group was found to support the children to share their experiences and ideas with others, first within the workshop context and later with the audience at the performance event. The warm-up activities were therefore both a rehearsal for becoming active in the workshop space and a way of becoming physically and mentally prepared for performing in more public spaces, building the children's sense of themselves as actors with authority in relating their experiences.

The initial games focused on developing sensory awareness and skills of close observation to prepare for walking around the local flooded landscape and taking photographs. We asked the children to see themselves as researchers – indeed, they were our guides around their local landscape – so we devised games where the children imagined themselves as "detectives," using all their senses to look for clues that would help to tell a story. Flooding is an intensely physical experience, involving movement, action and interaction and, as Ingold suggests, it is in movement that "knowledge is formed."[51] The aim of these games, then, was to heighten the children's sense of their own physicality and connection to their environment, in readiness for a walk that would engage their performing, sensing bodies in recalling their lived experiences of the flooding and reflecting on the knowledge those experiences generated.

Mutch has described how positioning children as "co-researcher[s]" supports them in finding a voice and gives "some control over how deeply they [wish] to go into sharing their experiences."[52] Central to our methodology was encouraging the children to share their own stories in their own way. For the walk each child was given a camera and invited to collect images that might help tell the story of the floods. For example, Thomas,[53] aged ten, photographed a hedge that lay between the river and his house, explaining "That's where I first saw the water." Back at the workshop, uploading the photographs onto a laptop and looking at them in groups, Thomas used this image to relate the clearly terrifying experience of seeing the floodwater surging through the hedge towards his home. Later in the day, when we invited the children to make 3D models about the flood, using a range of natural and arts materials, Thomas chose to make a sculpture of that memory, creating a striking blue wave arcing through a wall of twigs (see Figure 1). In this activity, Thomas was able to recall how the flood had appeared to him at that precise moment and he could draw on his own imagination and creativity, playing with scale, color and texture to convey something of what that experience felt like, as well as what the floodwater looked and sounded like.

Figure 1: Thomas's model - "That's where I first saw the water"

The workshop structure of playing games, walking, talking and 3D modelling with sand and other materials demonstrates children's engagement in a sensory, but safe, way with sometimes painful memories and the sharing of these with others who were flood-affected. Bingley has discussed the importance of the "sense of touch" involved in these methods in "connecting inner and outer worlds, holding and furnishing personal stories of physical and emotional importance."[54] Thomas's model, inspired by the memory of "That's where I first saw the water" articulated the terror of the flooding as he felt it, an experience he later

described as causing his heart to start "going really fast."[55] Thomas expressed this fear through his hands, as with the careful construction of his model he was able to externalize his experience and communicate it to others.

Going public: creating Flood Manifestos

Making the transition from the private space of the research workshop to the public stage of the performance event was challenging but vital in ensuring that the children's voices "travelled" further and supported their development as agents for change in UK flood management. In planning the third workshop, we selected material from the previous two workshops including photos from the walk, photos of models and extracts from transcripts. This material remained "mobile" in the sense that we used it as the basis for further discussion and analysis with the children. What individuals had spoken about, photographed and created was now, in a way, everyone's material and this became another important transition in helping the children find their voice. Seeing photos from the walks and the printed, color images of their models, as well as their own words typed up by transcribers, was exciting for the children. It gave new visibility to the material they had created and conferred upon it a sense of importance.

Reflecting on the material produced and starting to identify what we might call key themes was vital to the next stage of the process: developing ideas for change. Critical reflection on what we had made and discussed became a way to think about "what should be done differently next time?" It became clear that the children were very aware of how the crisis had been "performed." Their discussions revealed how much they noticed about friends' and family members' responses to the floods. The older children in particular expressed strong opinions about the actions of local and national government and the role of

the media in reporting the event. Having watched the unfolding response to the disaster, they were well-placed to consider future changes.

We asked the children to identify the decision-makers involved in flood response, in other words whom did they want to listen to us? The children then thought about actions that should be taken at family and community level, in schools and by local and national government to improve flood management. These discussions were later assembled into "Children's and Young People's Flood Manifestos," which encapsulated their ideas for change.[56] Thomas became particularly vocal during this part of the process, suggesting various ways that schools could do more to help children become better prepared for flooding, including flood drills and regular lessons outdoors so children could develop a more effective understanding of their local landscape. In this way, he appeared increasingly confident in expressing his experience - what he had learned from it and what others could learn. The carefully managed workshop process encouraged the children to engage closely with their environment and reflect imaginatively on their flood experience and recovery process, so they could articulate a wide range of important and at times innovative suggestions by tapping into their expertise.

Children as "flood actors" for change: the performance events

The project builds on our earlier research in Kingston-upon-Hull in revealing many positive ways in which children act in response to flooding, as well as some of the constraints they face.[57] While both studies highlighted some of the possibilities and challenges for children as "flood actors," what had been apparent since the first study was that their experiences and responses were not always visible to others, hence it was important to make it so. The fieldwork in each location therefore ended with public performance events before invited school staff, other children and parents, as well as policymakers and practitioners involved in

flood risk management such as representatives from the insurance industry, emergency services, health and social care sector, parish council, the Environment Agency, the Department for Environment, Food and Rural Affairs and the Cabinet Office-Civil Contingencies Secretariat. The aim was to bring the children's experiences, perspectives and ideas to the attention of those both directly and indirectly involved in flooding and invite them to respond.

When deciding how to structure this event, we were inspired by an interactive game of flood "snakes and ladders" originally devised by the Lancaster University Hull Floods Project team as a way to present the research findings to stakeholders.[58] We developed this snakes and ladders concept into a twenty-minute performance piece involving all the children. The piece was comprised from photographs, transcripts and theatre work generated by the children, including the material that the children had identified as most important. The performance was orchestrated entirely by sounds and actions from the children, in conjunction with a sequence of slides that appeared in the background. An adult volunteer from the audience was invited to "play" the game by moving along large numbered squares on the floor to the sound of children "shaking" the dice and showing and calling out the numbers (See Figure 2).[59]

The adult player thus moved through a "flood journey" but from the perspective of a child. Each time the player landed on a square something would happen: images appeared on the screen of the children's photographs or models, and the children read excerpts from the transcripts or brought the material to life through short drama sequences. The game structure helped to show how different actions led to different outcomes, such as the decision to remain in a flooded home or move into temporary accommodation. Indeed, the live, performative and interactive nature of the game emphasized the mobility of the flood experience, highlighting its temporal, spatial and multiple aspects. It also emphasized the arbitrariness of flooding and

13

how this related to the varying levels of agency that the children were able to exert during and after the event. This included constraints caused by the floods, such as struggling with schoolwork because of a lack of access to IT, which would send the adult player back down the board. In contrast, positive actions the children took, such as creating a family flood plan in case of future flooding, helped the player to move forward.

Figure 2: The "snakes and ladders" performance event

Carlin and Park-Fuller argue that performance can be a valuable way to hear and present stories of disaster.[60] They suggest that "disaster performance" can help participants to "rebuild a sense of identity" and that performing "disaster narratives" gives them "extended visibility."[61] We contend that these final performances gave the children a stage from which to present their stories first-hand and bring them to the attention of a wider audience. Through the act of performing their disaster narratives they were able to demonstrate their role as flood actors both during and after the event and their understanding of the need to prepare better. Just as the mobile methods used during the workshops had aimed to provide a supportive way for the children to articulate their experiences, the performances helped them narrate these experiences directly with a public audience concerned with flooding. It became a way for the children's voices to travel beyond the workshop space, while vividly conveying the research findings. As Carlin and Park-Fuller suggest, disaster performance "can show us what is personal and absent in the languages of public issues, policies, and broad population studies."[62] For the children, the very public nature of the performance affirmed the importance of their stories and the need for others to hear them. As Ruth, aged 13, said afterwards, "It feels good. It feels like we finally have a voice."[63]

The aim of the performance was not merely to show the children's experiences of

flooding but to mobilize the audience to change. First, the work challenged the adult audience's perceptions regarding the authority or credibility of the children's insights, a problem Tanner has identified with regard to disaster research with children.[64] By giving the children the stage, the children were able to use performance as a way, as Lloyd Williams describes, to "engage directly with the struggle around the politics of their representation,"[65] and challenge assumptions about their role in disasters. Next, drawing on Stuart Fisher's analysis of disaster performance, the sharing of their stories through performance could be seen as a "generous act" by the children, drawing the audience into an "*ethical* relationship" with the performers and putting a responsibility on them to respond.[66] Stuart Fisher suggests that, if testimony is a "fragmented collection of emotional, physical and bodily associations, and remembrances," then the performance of testimony can be seen "to *intervene* in the historical process, rather than simply 'reflect' it in a representational form."[67] This point echoes Büscher and Urry's thinking about the role of mobilities research as an "inquiry from within" and Cook and Butz's work on "mobility justice": the workshop process supported the children to reflect on their own and others' actions during the flooding, to process these experiences in terms of how things could be enacted differently next time and to support them in communicating their ideas for change to decision-makers.

The performances ended with the audience being invited to open an envelope they had been given on arrival. Inside was a copy of the children's Flood Manifesto, a pencil and a "pledge card" designed by the children. Audience members were asked to put their name and affiliation on the card and write a pledge about what action they would take in response to the performance. These pledges were collected in buckets by the children and hung up on washing lines for people to view during an informal reception afterwards. The process of writing and displaying the pledges was in itself a highly performative act and made a public show of the responsibility of the audience to reciprocate – to act in response to the actions

15

they had just witnessed. It also sustained the "movement" of the event by pointing to how the children's work had mobilized the audience and would thereby continue to stimulate change in flood risk management.

A number of these pledges have since been acted on. For example, the Environment Agency and the Fire and Rescue Service are now collaborating to develop an education programme on flooding and water safety for schools; Surrey County Council have included flood resources and training materials for young people on their "Surrey Prepared" resilience website;[68] and the British Damage Management Association invited the project team to develop a "Ten Tips" document and training course on how the insurance sector can better support flood-affected children and families.[69]

Conclusion: mobilizing resilience

Peek has noted how "Disasters harm the physical spaces where children live, learn, and play – their homes, neighborhoods, schools, parks, and playgrounds. Yet, adults rarely ask children about how they would like these spaces to be rebuilt."[70] This project specifically set out to learn from children how their lives were affected by the 2013/14 UK winter flooding and their ideas for how communities could better support children in future floods. In that way, our research sought explicitly to position children as flood actors, capable of contributing to change in UK emergency management. We suggest that our mobile and performance-based methodology invited the children engage in a physical, sensory way with their flooded landscape and respond creatively to the memories and ideas it evoked. Through this process, the children were able to draw on their experience and knowledge as "flood actors" to make a public call for change. Our use of performance powerfully demonstrated the children's expertise to decision-makers working in flood risk management, showing the active role children can play in disaster planning and calling directly upon the audience to respond. As

we have noted, many of those decision-makers have listened to that call and the children have since been invited to perform and present their ideas at local council meetings, as well as at national conferences to delegates from the damage management and environment sectors and an All Party Parliamentary Group on insurance at the House of Commons, London.

Fothergill and Peek's longitudinal study of post-Katrina recovery shows that it is critical to create opportunities for children to express their voices following a disaster and that actively helping during and after an emergency can support children's recovery, positively influencing "their post-disaster trajectories."[71] A number of the children in our project identified that taking part in this work had been a positive experience for them in terms of sharing their experiences and helping others and that they wanted to do more.[72] We suggest that our creative, mobile methodology, which played "at the edge or interface of experience, actual and imagined, between the individual and their art,"[73] enabled the children to reflect back as well as look forward in relation to their own flood experiences and to voice their call for much-needed changes. As such, the research process mobilized the children and supported them to begin mobilizing their wider communities. From voicing personal experience – "That's where I first saw the water" – the process moved towards the children's collective and direct invocation to policymakers and practitioners to respond to their experiences and ideas for change within UK flood risk management.

Biographical notes

Dr Alison Lloyd Williams is a Senior Research Associate in Sociology at Lancaster University. Her research interests are the uses of theatre in education and development and, more recently, disaster resilience. She has worked on school and community projects in the

UK, Japan and a number of African countries and developed the use of performance methods on the ESRC Children, Young People and Flooding project.

Department of Sociology, Bowland North, Lancaster University, Lancaster LA1 4YN.

a.lloydwilliams@lancaster.ac.uk

Dr Amanda Bingley is a Lecturer in Health Research in the Faculty of Health and Medicine, Lancaster University. Her work focuses on the relationship between mental health, well-being and place, including the effects of woodland and natural spaces on mental health in young people, research with older people, and the benefits of gardening, woodland workers, and older conservation volunteers. Her particular interest is in ethnographic, participatory arts research methodologies informed by her background in psychoanalytic geographies.

Dr Marion Walker is a human geographer and a Senior Research Associate in Sociology at Lancaster University. Marion's research interests are the geography of education, research with children and young people, and working with innovative methodologies. She has extensive research experience of working with flood-affected families in the UK and led the research on the Hull Children's Flood Project following the severe floods of 2007.

Maggie Mort is Professor in the Sociology of Science, Technology & Medicine at Lancaster University. She is Coordinator of the EC Horizon 2020 project CUIDAR: Cultures of Disaster Resilience Among Children and Young People, and the ESRC Children, Young People and Flooding research project. She teaches and supervises in disaster studies, health policy and practice, patient safety and medical uncertainty and has published widely on technological change in health and social care, and on health and social consequences of disaster.

Virginia Howells was formerly the UK Emergencies Manager for Save the Children UK where her role was to ensure children's needs are met before, during and after emergencies, particularly in the UK and Europe. A key part of this work focused on increasing children's resilience and participation within emergency management.

Endnotes

[1] Cabinet Office, *National Risk Register of Civil Emergencies* (London: Cabinet Office, 2015),

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/419549/20150 331_2015-NRR-WA_Final.pdf (accessed July 9, 2016), esp. 14.

[2] Intergovernmental Panel on Climate Change, *Climate Change 2014: Impacts, Adaptation, & Vulnerability* (IPCC, 2015), http://ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf (accessed May 5, 2016), 17.

[3] This work was supported by the Economic and Social Research Council (Grant No ES/M007367/1). Our special thanks go to the two schools and staff involved in this project, and in particular to the children who took part, without whom this study could never have taken place. Many thanks also to the two anonymous referees for their constructive comments on an earlier draft of this article.

[4] Kai Erikson, *A new species of trouble: explorations in disaster, trauma and community*

(New York: Norton, 1994), 29.

[5] See, for example: HM Government, Civil Contingencies Act (London: Cabinet Office, 2004); *Flooding: cooperation across Government: second report of session 2016-17* (London: House of Commons, 2016); Israel Rodríguez-Giralt, Daniel López, and Miriam Arenas, *Scoping and review report on evidence of children, young people, disasters and participation* (CUIDAR: Lancaster University, 2016), http://www.lancaster.ac.uk/cuidar/wp-content/uploads/2016/05/WP2-Final-report.pdf (accessed January 5, 2017).

[6] See, for example, Public Health England, *Flooding: health guidance and advice* (Public Health England, 2014), https://www.gov.uk/government/collections/flooding-health-guidance-and-advice (accessed July 9, 2016); HM Government, *Human aspects in emergency management: guidance on supporting individuals affected by emergencies* (London: Cabinet Office, 2016),
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/564306/human_aspects_guidance_2016_final.pdf (accessed January 10, 2017).

[7] Bala Raju Nikku, Children's rights in disasters: concerns for social work – insights from South Asia and possible lessons for Africa," *International Social Work* 56 no. 1 (2012), 51-66, esp. 52.

[8] United Nations International Strategy for Disaster Reduction (UNISDR), *Living with risk: a global review of disaster reduction initiatives*, vol. 1. (New York and Geneva: UN, 2004), 17.

[9] Mimi Scheller and John Urry, "The new mobilities paradigm," *Environment and Planning A* 38 (2006): 207-226, esp. 216.

[10] Karolina Doughty and Lesley Murray, "Discourses of mobility: institutions, everyday lies and embodiment," *Mobilities* 11, no. 2 (2016): 303-322, esp. 306.

[11] Kevin Hannam, Mimi Scheller, and John Urry, "Editorial: Mobilities, immobilities and moorings," *Mobilities* 1, no. 1 (2006): 1-22, esp. 13.

[12] Pia Christensen and Susana Cortés-Morales, "Children's mobilities: methodologies, theories, and scales" in *Movement, mobilities and journeys: geographies of children and young people*, vol. 6, eds. Caitriona Ni Laoire et al. (Springer Singapore, 2016), 1-32, here: 4.

[13] Sunny Stalter-Pace, "Underground theatre: theorizing mobility through modern subway dramas," *Transfers* 5 no. 3 (2015): 4-22, esp. 5-6.

[14] John Urry, *Mobilities* (Cambridge: Polity, 2007), 39.

[15] See, for example: Monika Büscher and John Urry, "Mobile method and the empirical," *European Journal of Social Theory* 12 no. 1 (2009): 99-116; Lesley Murray, "Looking at and looking back: visualization in mobile research," *Qualitative Research* 9 no. 4 (2009): 469-488; Anthony d'Andrea, Luigina Ciolfi, and Breda Gray, "Methodological challenges and innovations in mobilities research," *Mobilities* 6 no. 2 (2011): 149-60; Pia Christensen and Susana Cortés-Morales, "Children's mobilities: methodologies, theories, and scales."

[16] Amanda Bingley and Christine Milligan, " 'Sandplay, clay and sticks': multi-sensory research methods to explore the long-term mental health effects of childhood play experience," *Children's Geographies* 5 no. 3 (2007): 283-296, esp. 294 and 288.

[17] Maggie O'Neill and Phil Hubbard, "Walking, sensing, belonging: ethno-mimesis as performative praxis," *Visual Studies* 25 no. 1 (2010): 46-58, esp. 46-7.

[18] Ibid., 48.

[19] Maggie O'Neill, "Participatory biographies: walking, sensing, belonging," in *Advances in biographical methods: creative applications*, eds. Maggie O'Neill, Brian Roberts, and Andrew Sparkes (London: Routledge, 2014), 73-89, here: 76.

[20] Jon Anderson, "Talking whilst walking: a geographical archaeology of knowledge," *Area* 26 no. 3 (2004): 254-261, esp. 258.

[21] Bingley and Milligan, "Sandplay, clay and sticks: multi-sensory experience on mental well-being," 285.

[22] Katharyne Mitchell and Sarah Elwood, "Mapping children's politics: The promise of articulation and the limits of nonrepresentational theory," *Environment and Planning D: Society and Space* 30 (2012): 788-804, esp. 789.

[23] Helen Nicholson, *Applied drama: the gift of theatre* (Basingstoke: Palgrave Macmillan, 2005), 11.

[24] Maureen Fordham et al., "Understanding social vulnerability," in *Social vulnerability to disasters*, 2nd ed., eds. Deborah S. K. Thomas et al (Boca Raton: CRC Press, 2013), 1-30, here: 12.

[25] Monika Büscher and John Urry, "Mobile method and the empirical," *European Journal of Social Theory* 12 no. 1 (2009): 99-116, esp. 111.

[26] Ibid.

[27] Ibid., 112.

[28] Alan Prout, "Taking a step away from modernity: reconsidering the new sociology of childhood," *Global Studies of Childhood* 1 no. 1 (2011): 4-14, esp. 8.

[29] Ibid., 7.

[30] Christensen and Cortés-Morales, "Children's mobilities: methodologies, theories, and scales," 12.

[31] Pia Christensen and Miguel R. Mikkelsen, " 'There is nothing here for us..!' How girls create meaningful places of their own through movement," *Children & Society* 27 (2013): 197-207, esp. 200.

[32] Alan Prout, "Childhood bodies: construction, agency and hybridity," in *The body, childhood and society*, eds. Alan Prout and Jo Campling (New York: St. Martin's Press, 2000), 1-18, here: 17.

[33] John Barker, "A free for all? Scale and young people's participation in UK transport planning," in *Critical geographies of childhood and youth: contemporary policy and practice*, eds. Peter Kraftl, John Horton, and Faith Taylor (Bristol: Policy Press, 2012), 169-184, here: 179.

[34] Doughty and Murray, "Discourses of mobility: institutions, everyday lives and embodiment," 303.

[35] Christensen and Cortés-Morales, "Children's mobilities: methodologies, theories, and scales," 1.

[36] Peter Kraftl, "Beyond 'voice', beyond 'agency', beyond 'politics'? Hybrid childhoods and some critical reflections on children's emotional geographies," *Emotion, Space and Society* 9 (2013): 13-23, esp. 13.

[37] Ibid., 15.

[38] Harriet Beazley, "Inappropriate aid: the experiences and emotions of tsunami 'orphans' living in children's homes in Aceh, Indonesia," in *Children's emotions in policy and practice: mapping and making spaces of childhood*, eds. Matej Blazek and Peter Kraftl (Basingstoke: Palgrave Macmillan, 2015): 34-51, here: 38 and 47.

[39] Kraftl, "Beyond 'voice', beyond 'agency', beyond 'politics'? Hybrid childhoods and some critical reflections on children's emotional geographies," 14.

[40] Chris Philo, "Foucault, sexuality and when not to listen to children," *Children's Geographies* 9 (2011): 123-127, esp. 125.

[41] Mitchell and Elwood, "Mapping children's politics: The promise of articulation and the limits of nonrepresentational theory," 789.

[42] Yany Lopez et al., "Child participation and disaster risk reduction," *International Journal of Early Years Education* 20 no. 3 (2012): 300-308, esp. 303.

[43] Katherine Haynes and Thomas M. Tanner, "Empowering young people and strengthening resilience: youth-centred participatory video as a tool for climate change adaptation and disaster risk reduction," *Children's Geographies* 13 no. 3 (2015): 357-371, esp. 357.

[44] Israel Rodríguez-Giralt et al., *Scoping and review report on evidence of children, young people, disasters and participation*, 133.

[45] UNISDR, *Sendai framework for disaster risk reduction 2015-30* (Geneva: UNISDR, 2015), 23.

[46] See, for example: Katherine Haynes and Thomas M. Tanner, "Empowering young people and strengthening resilience: youth-centred participatory video as a tool for climate change

adaptation and disaster risk reduction," *Children's Geographies* 13 no. 3 (2015): 357-371; Bala Raju Nikku, Children's rights in disasters: concerns for social work – insights from South Asia and possible lessons for Africa;" Yany Lopez et al, "Child participation and disaster risk reduction;" Mary-Laure Martin, "Child participation in disaster risk reduction: the case of flood-affected children in Bangladesh," *Third World Quarterly* 31 no. 8 (2010): 1357-1375; Tom Mitchell et al., "The roles of children and youth in communicating disaster risk," *Children, Youth and Environments* 18 no. 1 (2008): 254-279.

[47] Tom Mitchell et al., "The roles of children and youth in communicating disaster risk," 263-4.

[48] Mary-Laure Martin, "Child participation in disaster risk reduction: the case of flood-affected children in Bangladesh," 1360; Bala Raju Nikku, Children's rights in disasters: concerns for social work – insights from South Asia and possible lessons for Africa," 52.

[49] Mitchell et al., "The roles of children and youth in communicating disaster risk," 265.

[50] Nancy Cook and David Butz, "Mobility justice in the context of disaster," *Mobilities* 11 no. 3 (2016): 400-419, esp. 401.

[51] Tim Ingold, *Being alive: essays on movement, knowledge and description* (London: Routledge, 2011), 17.

[52] Carol Mutch, "Sailing through a river of emotions: capturing children's earthquake stories," *Disaster Prevention and Management* 22 no. 5 (2013): 445-455, esp. 448 and 452.

[53] All participants are referred to by their pseudonym.

[54] Amanda Bingley, "Touching space in hurt and healing: exploring experiences of illness and recovery through tactile art," in *Touching space, placing touch*, eds. Mark Paterson and Martin Dodge (Farnham: Ashgate, 2012), 71-88, here: 71.

[55] Thomas says this in the project film: *The flood project: a children's manifesto for change*, (Children, Young People and Flooding: Recovery and Resilience, 2015), www.lancaster.ac.uk/floodrecovery (accessed July 10, 2016).

[56] The Flood Project Team, *Children's Flood Manifesto 2015* and *Young People's Flood Manifesto 2015,* (Children, Young People and Flooding: Recovery and Resilience: Lancaster University and Save the Children, 2015). http://wp.lancs.ac.uk/cyp-floodrecovery/outputs/ (accessed January 10, 2017).

[57] See: Marion Walker et al., *Children and young people 'after the rain has gone' – learning lessons for flood recovery and resilience, final project report for 'Children, Flood and Urban Resilience: understanding children and young people's experience and agency in the flood recovery process'* (Lancaster UK: Lancaster University), 94 and 98; Marion Walker et al., "'It came up to here': learning from children's flood narratives," *Children's Geographies* 10 no. 2 (2012), 135-150, esp. 140.

[58] The original snakes and ladders game was developed as a way to bring the experience of flooding and the long recovery process to the attention of key decision-makers who attended

an event about the project research findings at Hull Truck Theatre in 2009. For more details see: Rebecca Whittle et al., (2010) *After the Rain – learning the lessons from flood recovery in Hull, final project report for 'Flood, Vulnerability and Urban Resilience: a real-time study of local recovery following the floods of June 2007 in Hull'* (Lancaster, UK: Lancaster University, 2010); Will Medd et al., "The flood recovery gap: a real-time study of local recovery following the floods of June 2007 in Hull, North East England," *Journal of Flood Risk Management* 8 no. 4 (2014): 315-328.

[59] Some of the performance work can be seen in the project film, *The flood project: a children's manifesto for change*, available on the Children, Young People and Flooding: Recovery and Resilience website: www.lancaster.ac.uk/floodrecovery.

[60] Phyllis Scott Carlin and Linda M. Park-Fuller, "Disaster narrative emergent/cies: performing loss, identity and resistance," *Text and Performance Quarterly* 32 no. 1 (2012), 20-37, esp. 21.

[61] Ibid., 28.

[62] Ibid., 33.

[63] Ruth says this in the project film: *The flood project: a children's manifesto for change*, (Children, Young People and Flooding: Recovery and Resilience, 2015), www.lancaster.ac.uk/floodrecovery (accessed July 10, 2016).

[64] Thomas Tanner, "Shifting the narrative: child-led responses to climate change and disasters in El Salvador and the Philippines," *Children and Society* 24 (2010), 339-351, esp. 344.

[65] Alison Lloyd Williams, "Exploring theatre as a pedagogy for 'developing citizens' in an English primary school," in *Applied theatre: development*, ed. Tim Prentki (London: Bloomsbury, 2015), 185-201, here: 207.

[66] Amanda Stuart Fisher, "Bearing witness: the position of theatre makers in the telling of trauma," in *The applied theatre reader*, eds. Tim Prentki and Sheila Preston (London: Routledge, 2009), 108-115, here: 113-14.

[67] Ibid., 109-110.

[68] Surrey County Council, "Surrey prepared: prepare for emergencies," https://www.surreycc.gov.uk/people-and-community/emergency-planning-and-community-safety/emergency-planning/prepare-yourself-and-your-community-for-emergencies (accessed January 10, 2017).

[69] The Flood Project Team, *Ten tips for how the insurance industry can better support children and young people affected by flooding* (Children, Young People and Flooding: Recovery and Resilience: Lancaster University and Save the Children, 2016). http://wp.lancs.ac.uk/cyp-floodrecovery/files/2016/04/Tips-for-the-insurance-sector.pdf (accessed January 10, 2017).

[70] Lori Peek, "Children and disasters: understanding vulnerability, developing capacities, and promoting resilience – an introduction," *Children, Youth and Environments* 18 no. 1 (2008), 1-29, esp. 4.

[71] Alice Fothergill and Lori Peek, *Children of Katrina* (Austin: University of Texas, 2015), 220-1.

[72] See selected participant evaluations in Maggie Mort et al., *Final project report for 'Children, Young People and Flooding: Recovery and Resilience,'* (Lancaster, UK: Lancaster University, 2016), 38-39.

[73] Bingley, "Touching space in hurt and healing: exploring experiences of illness and recovery through tactile art," 80.