Defining disasters in the new mobilities paradigm

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Presentation overview

1. Discuss the significance of asking the question, ‘what is a disaster?’;
2. Reveal how there has been tendency in the field of disaster research to define disasters as temporally and spatially contained events;
3. Highlight some of the limitations of such a way of defining disasters and propose ways of expanding how disasters are temporally theorized;
4. Reflect on the broader ramifications of extending how disasters are conceptualized, with reference to recent debates in the sociology of time and mobilities research.

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What is a disaster?

The sociological study of disasters has ever since the 1950s grown steadily and become a well-established area of research.

An important stand of this field has debated the question, ‘what constitutes a disaster?’.

Defining key terms is not necessarily a key requirement for an area of research to flourish, but it does have some advantages. It clarifies existing research and spurns new lines of inquiry.

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Speed as a key characteristic of disasters

One of the most influential classical definitions of disasters comes from the sociological work of Charles Fritz, who famously defined a disaster as an:

> ‘event, ***concentrated in time and space***, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfilment of all or some of the essential functions of the society is prevented’ (1961, p. 655, emphasis mine).

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Speed as a key characteristic of disasters

In similar vein, David Alexander has argued that ‘a natural disaster can be defined as some ***rapid, instantaneous*** or profound impact of the natural environment upon the socio-economic system’ (1993: 4, emphasis mine).

Allen Barton’s definition of disaster also contains a similar caveat; disasters are framed in his account as ‘**sudden** and violent changes in the physical environment threatening both life and property’ (1969: 53).

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Speed as a key characteristic of disasters

However, over the years, there have been some calls within the disaster research literature to question the validity of ascribing speed as a key characteristic of disasters. These arguments have not been prominent or well accepted, partly because prominent authors in the field have sought to restrict the scope of what disasters mean. E.L. Quarantelli, for example, has argued that we ought to:

> 'exclude from the concept of "disaster" all very diffused events, including traditional droughts and famines and certain kinds of epidemics. We would do this because in our view it is best to think of the concept of disaster as an occasion involving an ***immediate*** crisis or emergency' (2005: 335, emphasis mine).

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Speed as a key characteristic of disasters

Quarantelli's concern is that moves to expand the boundaries of what constitutes a disaster run the risk of using the label 'to capture too much' (2005a: 333).

Quarantelli (2005a: 335-336) suggests that it is not appropriate to include diffuse and gradually occurring phenomena such as droughts, famines and the incremental spread of diseases like HIV within the definition of disasters because there are other concepts more fit for purpose, such as 'social or ecological problems'.

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Expanding the temporality of disasters

Although there is value in not leaving the definition of disasters too open ended, there is some cause to call into question how Quarantelli proposes to do so by equating disasters with rapidly occurring events.

- Firstly, this is because the distinction between diffuse and focused phenomena itself is not quite as self-explanatory as Quarantelli makes it out to be.

- Another reason to question the value of theorizing disasters as sudden events and of framing slow moving disruptive phenomena as social/ecological problems has to do with unclear/circular reasoning behind this distinction.

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Expanding the temporality of disasters

Of course, this is not to say that we should not conceptualize slow-moving phenomena as social/ecological problems. Rather, what remains unclear is why we ought to position slow moving social disruptions as social/ecological problems instead of as disasters. Social/ecological problems and disasters are not mutually exclusive concepts.

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Expanding the temporality of disasters

How then should we conceptualize disasters? One option is to adopt a broader definition of disasters, which captures how disasters have transformed over time to include new elements.

- Hans De Smet, et al. (2012), for example, have noted that there has not just been a change in the quantity of disasters. Disasters, in the 21st century, may in fact have undergone a qualitative shift.

- Steve Matthewman (2015) has further extended this line of thought by being much more detailed about the shortcomings of focusing the field of disasters research on the rapid onset and the spectacular. One of these concerns the limitations of conceptualizing disasters as events, instead of as processes. Matthewman proposes instead an 'everyday' conception of disasters.

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Expanding the temporality of disasters

While such accounts of disaster help us to gain an appreciation of not only how disaster definitions can evolve over time in response to new social realities, it is ultimately still worthwhile to be mindful of Quarantelli's point that 'acute' socially disruptive events are in some ways noticeably different from 'diffuse' ones. Conflating the two types of disasters would be to disregard the insight developed in the sociology of time that 'speed matters' (e.g., Scheuerman and Rosa, 2009; Hsu and Elliott, 2015).

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Expanding the temporality of disasters

One very straightforward way in which to preserve the distinction between rapidly and gradually occurring social disruptions under the broader concept of disasters is to appeal to Allen Barton's classical typology of collective stress situations (2005). Barton distinguishes between collective stress situations that are 'sudden', 'gradual', and 'chronic' (2005: 129). Correspondingly, these labels may also be fruitfully used to describe the different types of disasters that there are.

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Spatial implications

Alongside the requirement that disasters need to be temporally focused, so too have there been related accounts of disasters which posit them as spatially concentrated events. The theory of disasters I have sought to advance may do more than call into question the former way of understanding disasters, as by implication it also problematizes the latter view.

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What of disaster mobilities?

According to Tierney (2007), there is a need to link the sociology of disasters to other sociological debates. This is because the sociology of disasters risks further marginalization within the discipline if it does not engage with other concurrent lines of theoretical inquiry.

What would a robust engagement between mobilities research and the sociology of disasters look like? What does it mean to speak of disaster mobilities? I propose that there a numerous ways disasters and mobilities intersect.

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Disasters as mobility disruptors

Firstly, disasters can be conceptualized as ‘disruptors’ or ‘destroyers’ of mobility systems. Hannam et al. (2006) express this very point by discussing the social consequences of the September 11th attacks. These attacks that brought down the World Trade Center Towers in New York not only led to a massive loss of life, they also severely halted or in some cases significantly dismantled some mobility practices:

> A major station in the metropolitan transportation system was obliterated. A significant hub in the telephonic and electronic communications systems fell silent, while the mobile phone network was overwhelmed. And the crucial channels of governmental emergency coordination of police and fireman faltered. Bridges and tunnels were closed to traffic, crowds had to flee Manhattan on foot unable to contact loved ones, and air traffic was placed on an emergency footing (Hannam et al., 2006: 7).

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Disasters as mobility disruptors

Scholarly research around the Icelandic Volcano (Eyjafjallajökull) eruption in 2010 and its effect on aeromobile systems has especially helped to expand understanding of how mobility practices are ‘disrupted’ or ‘destroyed’ by disaster events (e.g., Birtchnell and Büscher, 2011; Budd et. al, 2011). One of the key insights developed is that disasters potentially transform how mobilities and immobilities in a given society are organized.

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Disasters as mobility motivators

Disasters can also be theorized as motivators or creators of mobile practices. As Peter Adey (2016: 36) notes,

> ‘mobility comes to constitute the ways that governance responds to emergency, just as the designation of emergency itself may designate a series of potential legislative and procedural practices of response. The emergency governance of mobility seeks to organise a series of activities, practices, technologies and representations that work in concert to respond and plan so as to get things moving again […]’.

In this regard, it is instructive to consider the activities of various disaster relief groups, such as the Red Cross or FEMA. Not only can the goal of these relief organizations be the restoration—or the development of new—mobility systems, it can also be the case that relief efforts themselves need to be achieve certain kinds of mobility in order to be effectual.

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Disasters as mobility motivators

Disasters also motivate movement in that they can prompt or force people to move. People move because they are displaced in some fashion (Sheller, 2013) or because they come to 'anticipate' some emergencies, as Adey (2016: 36-37) notes. Movement as a result of disasters may also be elective, as the phenomenon of 'disaster tourism' or 'tornado chasing' reveals.

Disaster motivated mobilities may also be virtual. When disasters occur, people may send out messages through social media networks to notify people of their status (Chaffee, 2016) or to produce and disseminate collective forms of intelligence (Buscher et al., 2014).

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Disasters as mobility indicators

A third facet of disaster mobilities concerns the deployment of disasters as indicators of various mobility systems. Disasters can reveal the existence or precariousness of certain modes of movement that may otherwise go undetected. Works focussing on Hurricane Katrina (Cresswell, 2008; Hanman et al., 2006) and the Icelandic Volcano (Eyjafjallajökull) eruption in 2010 (e.g., Budd et al., 2011; Jensen, 2011) have particularly done much to express this point. The latter, for example, is said to have 'illuminated our taken-for-granted dependency on air travel and our apparent "need" for air travel' (Budd et al., 2011: 37).

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Disasters as mobility indicators

There is also a sense in which disasters can reveal or generate inequalities or ‘social differences’ (Adey, 2016) related to various forms of movement. Mimi Sheller (2013) has developed this theoretical insight by analysing the social and mobile dimensions of the 2010 earthquake in Haiti. Sheller (2013: 186) has deployed the concept of ‘mobility justice’ in order to focus ‘our attention on who is able to exercise rights to mobility and who is not capable of mobility within particular scenarios’. Nancy Cook and David Butz also in a pair of works (2013, 2015) have also shown how disasters produce a cascading set of inequalities on account of their effects on mobility (e.g., social isolation, food and employment insecurity). They also find it beneficial to apply ‘mobility justice’ to disaster analysis and clarify the concept by appealing to Iris Marion Young’s concept of ‘domination’.

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Disasters as consequences of mobilities

The existence, intensification, or transformation of various mobility systems also can be construed as a causal factor of some disasters. This is clear if we consider the carbon-based system of automobility. Numerous accounts have tied the widespread reliance on carbon-emitting automobiles to anthropogenic global climate change, which carries the potential of producing disastrous effects on numerous populations. The onset and spread of virtual and physical mobile systems which allow people and objects to traverse spaces in distinctive ways can also be thought of as a precursor for certain kinds of disasters to occur. Some kinds of terrorism (such as the September 11th attacks) illustrate this facet of disaster mobilities (e.g., Little, 2006).

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Disasters as mobile agents

Finally, there is a sense in which disasters can be mobile in themselves. This is the case in terms of the germination of some disaster agents but also in the way in which disaster agents—once activated—spread across or between various social contexts. Adey (2016: 35) notes how various emergencies can be 'notoriously mobile, and difficult to predict, spreading like wildfire, cascading across different societal systems'. But how disasters develop also may have this quality. An action undertaken in one place may have disastrous implications for those in some other far removed context. In this regard, it may make sense to conceptualize some disasters as having a 'glocal' (Robertson, 1996) quality.

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Mobile methods of disaster research

If indeed it is apt to incorporate mobilities into the field of disasters research in the aforementioned ways, then it is worth asking what new methodological tools are needed to capture such mobile facets of disasters? In discussions about the unique methodological challenges that disaster researchers face, 'time' tends to be framed as 'a critical variable' (Norris, 2006: 173). There is a tendency in particular to identify the timeliness of fieldwork as a major obstacle. It is critically important to carry out research on disasters in a timely fashion because 'the longer [the disaster researcher] takes to get into the field the more remote the disaster becomes for his [sic] subjects' (Killian, 2002: 53). But there is another spatial issue here related to mobilities that also needs to be recognized. If social research itself involves patterns of movement, how do we attend to the issue of disrupted mobility systems that researchers may face?

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