

DISASTERS AND POLITICS

MATERIALS

EXPERIMENTS

PREPAREDNESS

Edited by Manuel Tironi, Israel Rodríguez-Giralt & Michael Guggenheim

Disasters and Politics: Materials, Experiments, Preparedness

Edited by Manuel Tironi, Israel Rodríguez-Giralt and Michael Guggenheim

Wiley Blackwell/The Sociological Review

This edition first published 2014
© 2014 The Editorial Board of the Sociological Review
Chapters © 2014 by the chapter author

ISBN 9781118531396 and The Sociological Review, 62:S1.

All articles published within this monograph are included within
the ISI Journal Citation Reports® Social Science Citation Index.
Please quote the article DOI when citing monograph content.

Registered Office

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

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First published in 2014 by John Wiley & Sons

Library of Congress Cataloging-in-Publication Data is available for this book

A catalogue record for this title is available from the British Library

Set in TimesNRMT 10/12pt by Toppan Best-set Premedia Limited

Printed and bound in the United Kingdom

**Disasters and Politics:
Materials, Experiments, Preparedness**

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Acknowledgements

As with any project, this book has a history. Its origins can be traced to a grant proposal that the three editors, together with Mike Michael, put together in March of 2011. The proposal was unsuccessful, but it incubated what became an open panel chaired by Israel Rodríguez-Giralt and Manuel Tironi in the annual conference of the Society for Social Studies of Science held in Cleveland in November 2011 ('The Politics of Uncertainty: Disasters and STS'). The call for papers was a tremendous success. We received more than 15 abstracts and the organization gave us three session slots in which 12 papers were presented. We want to thank all the participants for their contribution to the debate around which the idea of putting together a book sparkled. In fact, the backbone of this volume comes from that panel: Ryan Ellis's, Rodríguez-Giralt *et al.*'s, Manuel Tironi's, Deville *et al.*'s and Katrina Petersen's papers were presented and debated in Cleveland.

When the project of editing a book took shape, and the possibility of submitting a proposal to *The Sociological Review*'s Monograph Series was on the horizon, we invited people working at the intersection between disasters and politics. We also thank Nigel Clark, Ignacio Fariás, Lucy Easthope, Maggie Mort and Gisa Weszkalnys, for joining this project and contributing with extraordinary papers.

We are also grateful for the participants of the open panel 'Disasters: redesigning collective orders', organized by Zuzana Hrdličková, Manuel Tironi and Israel Rodríguez-Giralt at the Society for Social Studies of Science and European Association for the Study of Science and Technology joint conference held at the Copenhagen Business School in October 2012. Apart from confirming an increasing interest in disasters, the sessions also provided an excellent opportunity to discuss earlier versions of the work presented in this edited volume.

Two additional elements of the book's genealogy have to be accounted for. First, in November 2012 Manuel Tironi organized the seminar 'Disasters, catastrophes, calamities: radical controversies and democratic theory' at Universidad Católica de Chile. Although peripheral to the book (Israel Rodríguez-Giralt was the only contributor attending the seminar) the event confirmed a sense of momentum for the study of disasters from the perspective of Science and Technology Studies. And secondly, Goldsmiths College's CSISP, the Centre for the Study of Innovation and Social Process, has been, unwittingly and almost ghostly, the *place* of the book. Michael Guggenheim is senior lecturer at Goldsmiths and both Israel Rodríguez-Giralt and Manuel Tironi visited CSISP, although separately, during the making of the volume. Somehow then, the book was seasoned, stirred and cooked in the upper floors of the Warmington Tower in South London.

Series editor's note

The Sociological Review Monograph series publishes special supplements of the journal in collections of original refereed papers that are included within the ISI Journal Citation Reports and the Social Science Citation Index.

In existence for over fifty years, the series has developed a reputation for publishing innovative projects that reflect the work of senior but also emerging academic figures from around the globe.

These collections could not continue without the considerable goodwill, advice and guidance of members of the Board of *The Sociological Review*, and of those anonymous referees who assess and report on the papers submitted for consideration for these collections. I would like to thank all of those involved in this process, especially Linsey J. McGoey for her very considerable input into the collection as a whole, all of the referees, and also the editors of *Disasters and Politics* for having produced such an interesting and timely volume.

Chris Shilling, SSPSSR, University of Kent, UK.

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Introduction: disasters as politics – politics as disasters

Michael Guggenheim

Sociology discovers disasters

Suddenly, disasters are everywhere. The social sciences have recently increased their output in disaster writing massively. The world is one big disaster. Crisis looms. The end is near. One way to diagnose this state is by pointing to an actual increase in disasters. This could be called a naturalization of the problem. Another diagnosis is to point to a general catastrophic cultural mood, a *Zeitgeist*, what we could call a culturalization.

The first diagnosis, naturalization, is problematic for two reasons: disaster statistics tell a complex story: roughly speaking, throughout the twentieth century, the number of people killed by disasters has decreased, while the number of disasters and the damages reported has increased.¹ In short, society protects people better, but disasters have become more frequent because people build and live in increasingly disaster prone areas. Moreover, sociologically speaking, discourses need not be in sync with events, as every student of anti-Semitism or racism knows. Just because there are more disasters, there need not be more attention to them. Conversely, an increase in perceiving disasters does not necessarily mean that there are more disasters. There can be other reasons, as the forecasting of the now-forgotten ‘millennium bug’ showed.

The second, the general *Zeitgeist* argument may be true, but it is unlikely: Why should it hold for many societies on very different paths? Why would we assume its continuity, after the end time scare of the millennium bug faded? Also, a preliminary bibliographical analysis with Google Ngram (Figure 1) shows that the general thematizing of disasters did not really increase, while the sociology of disasters increased remarkably since the mid-1990s.² The question then is: Why can we observe such an increase in dealing with disasters in sociology and its neighbouring fields, an increase that is way out of proportion compared to the general increase in disaster literature and the actual amount of disasters?

I will thus attempt a third answer, which we could call politicization, much more pertinent to this volume. The answer proposed here is that disasters emerge because our theoretical apparatus makes us more sensitive to them. They allow social science to test various theories and interests that have come to the

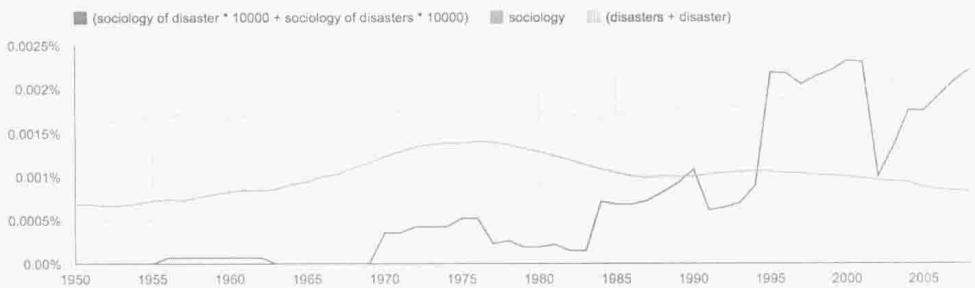


Figure 1: Google Ngram of books containing the words *sociology of disaster*, *sociology*, *disaster* (relative total amount of books).

fore in the last ten or twenty years. This third answer does not necessarily contradict the other two. It sits beside them. This volume contributes to a further calibration of our conceptions of disasters, focusing on how accounts of disasters are produced and the effects they have in the world. This calibration of disasters also allows us to move the sociology of disasters from the applied margins of the discipline, as an ancillary science to the practical concerns of disaster management, to the central concerns of general sociology (Tierney, 2007).

The problem of both naturalization and culturalization is that they both conceptualize disasters without recourse to politics. In both options, disasters increase, or discourses increase, but how this relates to politics remains unclear. In contrast, the various articles in this volume attempt to understand disasters as politics, and politics as disasters. In short, they analyse both the notion of disaster and the notion of politics.

Two movements to conceptualize disasters

This new relationship between politics and disasters can be understood by combining two important movements within the social sciences. The first relates to an interest in breaks and ruptures, rather than continuity and structure. This is closely linked to an attendant idea of politics as problematization of the composition of the world. Disasters as ruptures produce new compositions of the world and they are the former's explication. The second movement relates to an interest in reconceptualizing nature or the non-human as actors. Disasters, like accidents, are, sociologically speaking, the result of the combination of these two: they radically question the composition of the world, in all its technical, natural and social forms. Before discussing these two movements in detail, it is important to stress that conversely, there are other sociological ways to understand disasters, which eradicate either of the two. To start with, it is possible to understand disasters not as ruptures but as exaggerated continuations of the normal (Woodhouse, 2011). From such a perspective, there are no disasters as

ontologically different events from other events in the world. To believe that disasters are exceptional is to misunderstand disasters. Disasters are nothing but what happens in the world anyway, just with a different *intensity*. From such a perspective, there is no need for a different way of analysing and reacting to disasters. There is neither a need for a different methodology, nor for a specific theory, and there is indeed nothing inherently interesting that sociology can learn from disasters. Whatever society is, disasters are part of it. To further elaborate this argument, one could say that to insist on the ontological specificity of disasters implies buying into an ideology of disasters, that uses disasters to legitimate certain political goals (more on this below when discussing the state of exception).

Furthermore, in this argument it is possible to understand disasters as purely social events. Indeed, the original sociological attempts to understand disasters first needed to establish disasters as sociological issues, claiming them from the monopoly of the natural sciences. Sociologists introduced the term disaster to differentiate from hazards, understood as physical events (Perry, 2007). According to this definition, a hazard turns into a disaster by its *social effects*. An earthquake happening in a region where no humans live is not a disaster, it is just a trembling of the earth. This definition, then, is not about separating the human from the non-human but instead about trying to account for the fact that some natural events relevant for natural scientists – earthquakes where nobody is harmed – are not relevant for a sociology of disasters. This argument is, so to speak, premised on a negative definition of disaster: a disaster is a rupturing event, specifically one that ruptures human society. Such a definition was needed to create space for sociology within disaster studies, a field still dominated by the natural sciences. But for disaster studies *within* sociology such a definition is tautological: once they are thematized by sociology, what else would disasters be if not social events? Rather, the problem for sociology, once it has identified disasters as a proper theme, is how to conceive of disasters without understanding them as purely social events. Or, in other words: the problem for sociology is how to understand something that has its *origins* (at least in the case of natural and technical disasters) so obviously *not* within society.

Thus both of these negative answers of a sociology of disasters become framed, visible and problematic through the development of two separate trends within the social sciences. The first trend is to conceptualize disasters as ruptures and thus inherently *political* and second to conceive of them as *not* within society but still an object of sociology. Taken together these trends demand certain theoretical changes within the general apparatus of sociology. Only once such a general re-orientation of sociology is in place, do disasters start to make sense as relevant objects for a general sociology as opposed to their being simply another object for the expansion of sociology. Disasters, as non-social ruptures, are ideal test cases for these new strands of sociology, precisely because they highlight and enable the discussion of these new orientations.

To understand the first movement, it is important to see how disasters are at odds with most sociological theories and the foundational assumptions of social

theory. Since Hobbes' Leviathan, the problem for social theory was the problem of order and the explanation of stability: in short, to look at what connects one social instance with another over time, rather than looking at events that punctuate continuity and disassemble one instance from another.³ In this tradition of social theory man is disaster – and politics (or society in general) is what saves men from killing each other. Whether it is the state, or values and the social system (Parsons), fields (Bourdieu), imitation (Tarde) or technology (Latour), the arrow of explanation is always towards explaining what holds society together, what produces stability and predictability, assuming that society has a 'natural' tendency to fall apart.

This is why early disaster studies needed to legitimate this unusual derivation. When Erikson did his pioneering study of the Buffalo Creek flood, he thus felt compelled to defend his decision to focus on one 'unique human event', 'a task normally performed by dramatists or historians' (Erikson, 1976: 246). The predilection to explain stability also explains why many studies of post-disaster communities can make the seemingly counter-intuitive claim that after disasters communities do not necessarily fall apart, but readjust (Carr, 1932), are inventive or even hold together better (Jencson, 2001; Kendra and Wachtendorf, 2007).

Breaching experiments in ethnomethodology were probably the first attempt to put rupture at the expense of continuity at the heart of social theory and to use rupture to learn about the composition to the world (Garfinkel, 1967). The study of controversies has borrowed this insight by understanding that calling into question, critiquing and disagreeing are sociologically productive processes. These perspectives together have informed studies of accidents, breakdown and repair (Heath *et al.*, 2000). As intellectual precursors of disaster studies (as understood here), studies of accidents showed in small scale how the world falls apart and needs to be put together. Disasters considered as ruptures expand these insights and methodologies to a much larger scale and even to the world (see Clark, in this volume).⁴ By shifting the focus to large-scale events and the problem of the contingency of the *world* they allow us to see how the world is composed. Disasters, then, become inherently political events because they pose questions about who should be allowed to re-compose the world and how (see Fariás and Tironi). The shift from accidents to disasters is, then, not merely one of scale but of focus: if a disaster cannot be contained within one location, one machine or one organization, issues of politics, distribution and justice come to the fore. Who should be responsible for action (Fariás)? How does society distribute preparedness (Easthope and Mort, and Deville *et al.*)? How should collectives make decisions regarding risks (Weszkalnys and Ellis)? How should the world be rebuilt (Tironi)?

To understand the second movement, it is important to understand that the concepts of disasters and of preparedness measures are both at odds with a purely *social* sociology. If sociology is the analysis of the social world, actual disasters (and not only their aftermath) become difficult to describe for sociology. How to describe a disaster, if not by describing the movement of earth, the

masses of water, the falling trees, levees and houses, the rubble and dust, the birds (Rodríguez-Giralt and Tirado) and contaminated letters (Ellis)? How to explain preparedness and recovery without recourse to bulldozers, dams and bunkers (Deville *et al.*)?

This new sociological interest in materiality has its roots in the laboratory and in new technologies. It emerged from attempts to understand how scientists construct facts and invent new technologies. From these initial questions, it has spread to all kinds of fields, but it is important to keep its origins in mind since, as Clark has argued, the materialism of Actor-Network Theory (ANT) and its allies is a materialism of divide and control over technological artefacts (Clark, 2010). It usually assumes scientists and engineers construct things in order to control other things or people.

In disasters, however, the situation is very often quite different. Disasters are situations when matter is out of control and, compared with studies of accidents, out of control on a massive scale. In fact, if there were a need to tell accidents apart from disasters, it would be the remaining amount of control over actor networks. Accidents are contained and control lapses momentarily and spatially on a relatively small scale – a space ship explodes, a car crashes, a train derailed – but the larger network continues to work (it is no coincidence that the examples here most relate to traffic). Repair, as a counter strategy can focus on the technology that stopped working (Graham and Thrift, 2007). In an earthquake, nuclear disaster or flood, there is no such possible focus. Disasters then, would be defined as networks or cosmograms themselves that collapse, which radically poses the question of the composition of the world as a whole. Power and intelligibility ceases not just for one particular part, but for all parts involved. Disasters, even more than accidents, are test cases to understand a world in which the material and the natural are not only an object of concern and control, but the very origin of radical change.

But this very wholeness also poses a problem for Actor-Network Theory because the vocabulary of ANT is geared towards disentangling big concepts into micro-processes. But, one might argue, disasters are precisely those events that cannot be disentangled and that act and are experienced as one big entity. As suggested in the articles of this book, it might be argued that the analytical tools of ANT, and sociology in general, are not very well equipped to deal with such things. It is no coincidence then that the articles assembled here do not give an account of disasters as wholes but of what follows before and after. Temporalization of punctual events is the analytical strategy of choice, but we can legitimately ask whether this does not miss the very object of analysis. In that sense, a true sociology of disasters still remains to be written.

Based on the two central movements in the sociology of disasters, described above, the articles in this volume adopt different angles in analysing disasters. The articles collected here are attempts to look at how disasters reconceptualize politics and how politics reconceptualizes disasters. Thereby they engage in various kinds of symmetry (Law, 2003). By symmetry it is implied that the articles shy away from settling too quickly for one side of any hot or strong

dichotomy: whether it is truth or falsehood, political or scientific explanations, the attempt at explanation or the attribution of blame (Potthast, 2007). Symmetrical approaches rather take as their starting point to inquire how attributions to one side of various distinctions are empirically accomplished: why and when are people blamed or systems explained? When are scientific or political accounts preferred? When are situations explained with symbols and meaning and when with materiality?

However, independently of such symmetries, the authors in this collection begin from different starting points and it is therefore worthwhile to point out how these starting points relate to disasters and politics. The following pages thus try to analytically grasp what it means to start with politics or disasters as the vantage point of analysis. This also allows us to situate the contributions in this book within a wider literature on these issues, including some vantage points not covered. Starting from either disasters or politics produces different accounts of both of these concepts with quite different political solutions, even if these remain often implicit. To sketch these options then allows us to also better understand the underlying conceptions of disasters and politics, through a comparison with some alternatives not taken and not covered in this book.

Disasters and politics may be conceived in the two following analytical ways: first, as 'disasters producing politics' and second, as 'politics producing disasters'. In the former case, disasters are relevant because they are productive. The disaster itself is noteworthy for its capacity to produce a particular kind of politics. The latter focuses on the problematic role of politics to produce disasters. From this point of view, it is politics itself, as a mode of ordering the world that produces disasters for its own purposes and according to its own rules.

Apart from asking how these approaches conceptualize the relationship of disasters and politics, further questions follow: What are their aims of explaining or changing the world? How do they distribute power and blame in the world among actors? Do they seek to distribute it among many actors, or attribute it to one? How do they take into account 'non-traditional' actors, such as lay people or nature? How do they distribute an empirical focus between these various actors?

Disasters as producing politics

There are at least three versions of 'disasters as producing politics' with changing levels of force attributed to disasters. First, there is an approach, which could be termed *disasters as prime empirical sites to understand about politics*. This approach is not particularly attentive to disasters as ontological events, but rather starts from empirical practicalities: disasters, it turns out, are particularly good empirical sites for understanding politics. This approach does not necessarily depart from established sociological research. It also does not necessarily

theorize disasters, but takes them for granted as *events*. What this strand does understand, and historically, has been early to grasp, is that disasters are prime events for understanding politics, simply because, empirically, all kinds of socio-logically interesting things happen, in the same way as ethnomethodology understood that in the collapse of interaction sociologically interesting things happen. In the words of Hoffmann and Oliver-Smith: disasters ‘unmask the nature of society’s social structure’ (Oliver-Smith and Hoffman, 2002: 9), echoed by Petersen in this volume when she writes that disasters ‘are messy times when norms . . . fail’ and ‘make it possible to analytically denaturalize and examine these practices that create norms’. This insight is paralleled by the idea in technology studies to study accidents and breakdown to understand technology in use (Wynne, 1988).

According to this view, disasters change not society, but the work of the sociologist: they decompose what is usually difficult to analyse. Disasters are primarily a welcome methodological tool.

Considering disasters as *material events* is different from the first perspective, as it takes its guidance from Science and Technology Studies (STS) and ANT to analyse disasters as events in themselves. This approach focuses on disasters as events, but unlike the first approach, does not leave disasters intact, instead disassembles them into their constituent parts. A disaster, as a rupturing event, then, does not rupture a social system, but is produced as an event (also see the conclusion by Michael). Historically, this research strand follows the shift from religious to scientific explanations of disasters. If disasters are not punishments by the gods, but natural events, then the naturalness of the events can be analysed. Measuring the location, strength, likelihood and damage of possible or previous floods, earthquakes or nuclear strikes is a scientific problem, for which different solutions with different answers exist (for some examples see Lane *et al.*, 2011; Bijker, 2007; Demeritt *et al.*, 2013 and Farías, Petersen, Weszkalnys, and Rodríguez-Giralt *et al.* in this volume). It may depend on who does the calculation, what is included in the calculation, and which objects are seen as intervening in the composition of disasters.

This approach takes a different route to the first with regard to the way in which the empirical focus is distributed. The first attempt accepts disasters as big, single events that pose a problem for society and politics. The focus of analysis becomes the political response, its actors and organizations and the decisions they take to answer to the event. The latter breaks the disaster apart: the question becomes rather when and how⁵ a disaster as a unitary event comes into being. The standard STS answer is that disasters are a result of techno-scientific processes, rather than natural or political. The focus of this approach is to disassemble a disaster and turn it into a problem: there are not hurricanes as disasters in themselves, but techno-scientific processes that produce hurricanes, floods, or nuclear accidents – both as events themselves and as accounts of these events. The naturalness of (natural) disasters gets bracketed, not just because political processes are guilty of producing disasters in the first place, but because science and technology in themselves are not taken as simply recording

the occurrence of disasters, but producing them. This is not to blame science and technology in an anti-modernist impulse, as the environmental movement is prone to do, but to accept both that the very materiality of social disruption is co-produced by science and technology and that there is no way to account for such material disruption without the help of science and technology.

For such an analysis there are thus two levels. First, to study how modern science and technology produces disasters as material events. This may include a study of the building technologies of dams, cars, space shuttles or buildings, or – on a broader scale – of ecological change and how such technological advances in themselves create disasters. Second, it is about studying how scientists account for risks and for existing disasters. What are the scientific assumptions, theories and descriptions for distributing blame between levees, engineers and political decision makers in practice?

Disaster as cosmopolitics is a combination of the two former approaches. Disaster as cosmopolitics uses disasters to understand how the world is reorganized on multiple levels through and after disasters. From the viewpoint of cosmopolitics a disaster recomposes the world on every level. Cosmopolitics asks what the world is composed of, who is recognized as a legitimate actor (Fariás) and what capacities these actors have (Tironi). The ‘who’ implies not only distributions of decisions among scientific experts and policy-makers, but also among different entities, such as tsunamis, birds and measurements, or actants in ANT terminology. Cosmopolitics then ideally does not disassemble politics or disasters but observes the assembly of worlds, with politics and disasters both constituting events within this world. Disasters are particularly amenable to cosmopolitics, as they unravel the foundations and processes of composing the world, and may therefore offer a place ‘in which the cry of fright or the murmur of the idiot’ can be heard (Stengers, 2005). One may remember here the movie ‘Train de Vie’ by Radu Mihaileanu, in which a village of Romanian Jews, hearing of the oncoming holocaust, entrusts itself to the idea of the village idiot: they charter a train, half of the village dresses as Nazis and ‘deports’ the other half and they all drive west, through enemy lines into freedom, duping the real Nazis into believing they are fellow Nazis. The looming disaster, and the hopelessness of the situation literally puts the world at stake, making the proposition of the village idiot one worth taking into consideration.

The analytical difficulty of a cosmopolitical approach, then, is how to juggle the assembly and disassembly of worlds. While the two former approaches can each drill in a single direction and probe the composition of either disasters or political processes, the problem of cosmopolitical approaches is that their field of inquiry and analytical focus is potentially unlimited: who or what should be included in the analysis, and to what extent? This becomes a particular problem if cosmopolitics is conceived as a ‘positive’ form of analysis, that looks into the composition of worlds, and not just the decomposition, into an attempt to ask for new forms of disaster planning (Latour, 2007; and see Fariás, this volume).