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Laura Centemeri, Burgess James Peter, Sezin Topçu

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## **Disaster recovery and the repairing perspective: between theory and practice**

Laura Centemeri, J. Peter Burgess, Sezin Topçu

### **Repairing and the irreducible singularity of contexts**

A significant body of literature – often focused on the case of the United States – has been developing since the 2000s on the topic of ‘disaster recovery indicators’ and ‘recovery plan quality principles’. Its main objective has been to address evidence of a pervasive failure of recovery processes to reduce vulnerability to future disasters<sup>1</sup>. While the contributors to this volume recognize that these efforts can help policy-makers and actors on the ground in their search for sound operational guidelines for recovery, this has not been the aim of the book. Instead, it has sought to construct a dialogue and create a cross-fertilization between disaster studies and theoretical debates in social sciences. This dialogue is essential if we are to fully measure the challenge that the socioecological complexity and cultural/ontological ‘multiplicity’ of contemporary societies pose to our understanding of disasters (see Mol 1999; De la Cadena and Blaser 2018). In an increasingly interdependent world, which is marked by an awareness of the planetary impact of human activities, disasters are not only on the increase, they are morphing into some sort of ‘disastrous condition’ that is punctuated by disastrous events.

Taking current theoretical debates into consideration in disaster research is imperative. On the one hand, they allow a better understanding of the overall complexity of multiple systemic crises, including climate change, financial instabilities and the crisis of democratic legitimacy. On the other, we firmly believe that these debates can feed the ‘sociological imagination’ of the field of disaster studies and contribute to developing the inclusive potential of policies aimed at supporting collective capacities of prevention, preparedness and response to disasters. In return, the dialogue between disaster studies and the theoretical perspectives that surround it can help to clarify and test the operability of approaches otherwise condemned to remain just a paper exercise.

The contributors to this volume all share this view. This book is the result of a dialogue that has been sustained over the past decade between various academic and activist contexts. Each contributor is positioned at the boundary between the specialist field of disaster research and the social sciences, especially sociology and anthropology. A number of them also share some form of engagement with movements that have emerged in post-disaster situations. This positioning has led to the identification of the theoretical question of ‘repairing’ as a

promising bridge between disaster research and the larger theoretical issues and key political concerns.

To illustrate this potential, the contributors to this volume analyse post-disaster situations as contexts that are particularly conducive to deepening our understanding of the multiple repairing and ‘reconstructing’ processes that continuously shape societies and their environments. Taken together, the contributions provide an original interpretation of disasters as ongoing and complex processes whose temporal regime is not clearly identifiable, an aspect widely acknowledged in the disaster literature. As several contributors point out (see in particular Chateauraynaud and Debaz 2021), repairing processes show multiple temporalities. These processes participate in the reproduction and transformation of the social fabric and in the ecologies that human communities shape through the organization of collective life within a particular environment.

The multiplicity of repairing processes reveals different repairing concerns, which can sometimes come into tension, if not open conflict, with each other: defining damages, assigning responsibilities, punishing the guilty, sanctioning activities and behaviours detrimental to the community (as in Jobin 2021; Natali and Hall 2021; Revet 2021; Barbot and Dodier 2021); ensuring the functionality of the infrastructure that provides fundamental goods and services and preparing for future crises (as in Topçu 2021; Gorostiza and Armiero 2021; Keck 2021); practically taking care of damaged people and places, healing and reconstructing the capacity for collective action and an imagination of possible futures (as in Chateauraynaud and Debaz 2021; Delatin Rodrigues 2021; Thorsen 2021). The evidence from the research collected in the book shows that the unfolding of the different processes of repairing – with a particular focus on the role played by the justice system – is an important element that ultimately contributes to explaining a community’s capacity, or lack of capacity, for resilience.

The contributions clearly illustrate considerable diversity in the kinds of disasters. This diversity reflects systemic inequalities that have historically sedimented in their specific contexts and are produced and reproduced in very different ways. Moreover, the resources (including social capital) that local actors can mobilize in the conflict generated by what we have called the ‘whatness’ of the problematic situation are also unequally distributed inside and across specific situations of action.

The various processes of repairing reveal the interconnection of economic, ecological, technical, political, cultural and symbolic dimensions, which all play a part in the way

communities make sense of problematic situations. Precisely because of this complexity, establishing criteria of general validity for intervention and assistance in post-disaster situations with the idea of ensuring successful recovery seems to us a somehow Sisyphean endeavour. A successful recovery emerges at best retrospectively as a way of putting into a narrative form a trajectory that could have not been anticipated. The terms of what can subsequently be defined as a successful recovery are the subject of negotiation and conflict and result from the situated confrontation of different normative expectations and worldviews. Moreover, what is meant by (a good) recovery varies depending on the level at which a social actor observes the process and the temporality in which they are situated. In other words, the quality of recovery is to a certain degree in the eye of the beholder.

The active involvement of the communities that have directly suffered the consequences of a disaster remains an essential goal and a non-negotiable standard when decisions are being made about the measures and evaluation criteria that should guide recovery initiatives. This involvement must be accompanied however by an acknowledgement of the diversity of the normative presuppositions about recovery that come into play. These are shaped by among other things the many forms of inequalities and structural violence that emerge in concrete situations (see on this point the reflections of Smith and Birkland 2012; Tierney and Oliver-Smith 2012; Johnson and Hayashi 2012).

Consequently, the contributions to this book do not seek to provide a theory of successful recovery since the very notion of successful recovery is problematized as a contentious notion. This finding does not imply however that we should descend into a relativism that condemns us to inaction. Rather, it compels us to support an approach to recovery that does not obscure the structural conditions that produce disasters while giving centrality to the irreducible singularity of contexts.

More precisely, the perspective on recovery embraced by the contributors to this book is one that identifies, within the different processes of repairing that become visible in the aftermath of a disaster (legal, technical/ecological, sociocultural, experiential), key situations from which to understand how social needs emerge and take shape contextually and how structural conditions of socioecological vulnerability are countered or (re)produced (such as those highlighted by Jobin 2021 and Delatin Rodrigues 2021 in this volume).

By taking into account voices that are silenced and issues that are excluded from the debate (such as the question of what is beyond repair discussed by Topçu 2021 in the case of nuclear disasters), the repairing prism reveals the intertwining of the material, ecological, structural,

moral and interpretive aspects that shapes specific situations of action and experience in a disaster. It also contributes to a better understanding of the mechanisms that sustain, in ways that vary according to the context, the reproduction of different forms of injustice, such as distributive injustice, epistemic injustice, environmental injustice and ‘narrative injustice’ (the latter is extensively discussed by Gorostiza and Armiero 2021).

Moreover, the fact that this perspective considers the normatively laden interpretive activities in concrete disaster situations is propitious for the ‘art of noticing’ (Tsing 2015) unexpected forms of response to disaster, such as those analysed by Keck (2021) and Thorsen (2021) in this volume. Post-disaster recovery is thereby confirmed as a non-linear process, a point highlighted by Chateauraynaud and Debaz (2021) (but see also Tierney and Oliver-Smith 2012).

The perspective of repairing outlined in the book can thus be understood as a ‘sensitizing’ tool that invites disaster researchers to pay attention to the interweaving of repairing issues, *dispositifs* and practices in post-disaster situations. In particular, the perspective opened up by Barbot and Dodier through the notion of ‘ecology of reparation *dispositifs*’ is promising in terms of offering an original vantage point for comparing different recovery trajectories.

### **Accounting for structures: from disaster capitalism to disaster colonialism**

Despite an increase in international initiatives aimed at disaster risk reduction, the number of catastrophes on a global scale has risen steeply over the last two decades. At the same time, there has been a worldwide increase in the number of people living in extreme poverty, which is a proven cause of vulnerability and an accelerator of risk and disaster (Oliver-Smith and Hoffman 2019).

At the time of writing, the world is facing the consequences of the ongoing Covid-19 pandemic. Describing it as a ‘syndemic’, Richard Horton, editor-in-chief of *The Lancet*, called for governments to ‘devise policies and programmes to reverse profound disparities’ (Horton 2020). A syndemic, or synergistic epidemic, refers to the idea that the virus does not work in isolation but in combination with conditions such as obesity, diabetes and heart disease, which aggravate the damage caused by Covid-19. The distribution of these conditions is closely linked to conditions of poverty and inequality. The ‘whatness’ of Covid-19 is a matter of controversy, and the meaning that will prevail will guide the response to the global crisis being triggered by the disease. In this context, identifying and analysing the various claims involving repairing that are emerging seems to us a promising perspective for

understanding to what extent the Covid-19 pandemic/syndemic will or will not operate as a 'reconfigurative' event at the systemic, local and individual levels.

From the point of view of disaster research, the evidence is now overwhelming. Ecological degradation together with injustice and social exclusion are the systemic issues that need to be urgently addressed in order to achieve effective disaster risk reduction. At the same time, these structural elements manifest and reproduce in ways that are specific to the culture, history and ecology of particular places. This means that there are no universally valid solutions to the problem. Top-down interventions always generate 'frictions' (Tsing 2005) once implemented locally. We believe that the lack of interest in understanding and working with (and within) these frictions contributes to the fact that recovery programmes become 'confirmatory' – instead of 'transformative' – interventions, that is, interventions that corroborate logics that maintain and reproduce structural conditions of social inequality and ecological degradation (Pellizzoni 2020).

In this sense, there is an urgent need, as Gaillard (2019: 7) argued, to 'relocate disaster studies within the realm of its original political agenda' in order to restore the political and social relevance of the vulnerability perspective that radically transformed this field of study in the 1970s. It is now essential, as Gaillard (2019: 7) also pointed out, to integrate the contributions of subaltern studies into disaster research so as to promote a research agenda that 'builds on the importance of local researchers analysing local disasters using local epistemologies, especially in the non-Western world'. A similar point was raised by Sun and Faas (2018: 630): 'one key shortcoming of the political ecology of vulnerability approach is that it preserves and privileges the subjectivity of western science over other ways of seeing and being'. According to these authors, the conceptual challenge that the multidisciplinary study of disasters faces today is that it must link up the 'social production' and 'social construction' of disasters perspectives. More specifically, this implies that we 'must contend with multiple ways of knowing – for example, the many people of the world who view nature as including humanity *and* culture, who see landscapes as part of their communities' (Sun and Faas 2018: 630). As Calandra pointed out in her discussion of the category of 'disasta' in Tongan discourse, 'grasping the cross-cultural dimensions of disaster requires an appreciation of different theories of causality and moral economies of attribution' (2020: 11). There is nonetheless an enduring 'procedural vulnerability' in disaster research, meaning that the mainstream methods mask important issues and are often blind when it comes to conditions of structural violence (see Veland et al. 2013).

Aware of these problematics, this exploration of the disputed ‘whatness’ of disaster, the diversity of ‘normative expectations’ and the meanings of repairing that inform not only the design but also the practical relation to instruments, rules and *dispositifs* of disaster recovery has been our way of responding to the need for a framework that takes into account a plurality of ways of knowing, experiencing and making sense of disaster situations, including perspectives that do not recognize the category of disaster as pertinent.

In this regard, the contributions collected here all adopt, albeit from a range of different perspectives, relational approaches (like pragmatism) to the interpretation of disaster situations as ‘problematic situations’ in which the moral, epistemic, political and material dimensions are intertwined. As other authors have pointed out (see Go 2016; Doucet 2018), relational approaches in the social sciences allow a fruitful dialogue with perspectives inspired by postcolonial theory and ‘ontological politics’ that are attentive to how divergent knowledges and practices ‘make worlds’ (see De la Cadena and Blaser 2018). However, the research in this book shows that the potential for this diversity to really make a difference in the design of disaster policies is limited.

We mentioned in the introduction to the volume the notion of ‘disaster capitalism’, and we have seen in the chapters that followed how powerful economic actors – often supported by state authorities – contribute to generating situations of slow disasters (see Jobin 2021; Delatin Rodrigues 2021) while also conditioning in advance the terms of good recovery (as in the case discussed by Topçu 2021). The systemic perspective that focuses on the interconnection of disasters, economic interests, globalization and financialization highlights the implicit adherence of many disaster situation intervention practices to the globally promoted model of neoliberal development.

For example, in their research on ‘disaster capitalism’ in post-earthquake L’Aquila (Italy), Imperiale and Vaclay (2020: 3) showed how institutional and financial strategies, which were interwoven with the mechanisms that states usually mobilize in disaster situations such as ‘the command-and-control approach, emergency powers and top-down planning’, had sustained multiple opportunities to ‘capitalize on disasters’, not just during the recovery phase but also in relation to the activities of ‘imagining and planning’ for future disasters. In this sense, future disasters can also be seen as opportunities to orient a society’s development in ways that often lie ‘outside political accountability’ (Fortun et al. 2017: 1011).

Moreover, the case of post-earthquake L’Aquila shows that while the usual channels of profit creation are suspended in post-disaster situations, others emerge that are made socially

acceptable by the way in which the disaster event and its consequences are framed. As the authors highlighted, the processes of sense-making concerning liability, which is one of the aspects pertaining to what we have called the juridical understanding of repairing, are particularly important in this respect. Social blaming, corruption and the inadequacy of structures are all examples of liability frameworks that contributed to determining the course of recovery in the case of L'Aquila.

As Villanueva and Cobián (2019: 1) rightly pointed out, disaster capitalism is in many cases only 'the latest rendition of a long legacy of colonial capitalism' Disaster scholars have long recognized that disasters are the result of societal histories and that slow disasters feed fast disasters (see in particular Oliver-Smith 2010; Tierney 2014). The important research that has denounced the existence in the United States of an enduring racial divide in disaster relief (see Bullard 2008; Wright 2011) has also highlighted the fact that disaster situations not only amplify but *produce and reproduce* structural inequalities. In this respect, Danielle Zoe Rivera spoke of an ongoing 'disaster colonialism', that is, a colonialism that operates through disasters, where the term 'colonialism' points to 'the procedural vulnerabilities operating through pre-disaster and post-disaster response' (2020: 8).

### **Repairing against 'defuturing': design activism for recovery**

One of the topics that this book only marginally addresses (see Revet 2021) but which is increasingly central in explaining the transformations that this very same notion of disaster is undergoing in our societies is the specific challenges raised by climate change. Together with the erosion of biodiversity, climate change presents us with the looming possibility of a planetary catastrophe. In particular, we want to emphasize the value, for our discussion on recovery and repairing between theory and practice, of the literature on the role of urban planning in recovery processes and adaptation to climate change (see Kim 2021).

In the space of just a few years, cities have gone from being one of the main ecological problems to the central players in the development of climate change mitigation and adaptation policies (Angelo and Wachsmuth 2020). However, the numerous 'redemptive approaches to cities (sustainable city, liveable cities, smart cities, resilient cities, and the like) (...) do not have the corrective force to deal with the critical situations cities are increasingly facing' (Fry 2017: vii).

The academic discussion on how to think about urban planning in relation to the challenge of climate change has seen the emergence of a repairing framework that could usefully inspire

planning for disasters (and disaster recovery) more generally. From this point of view, a framework that echoes our concern for complexity and multiplicity in addressing disasters recovery is that of ‘metrofitting’, elaborated by Tony Fry, which is based on an approach to urban spaces as ‘broken’ and ‘ruined’ (Fry 2017).

‘Brokenness’ was seen by Fry as the precondition of disaster. Brokenness – as the author explained – is not (only) a condition ‘reducible to built fabric or infrastructure in visible need of repair. It can be equally evident in a failing operational metabolism, social ecology, system of governance and inability to manage a crisis of structural unsustainability’ (Fry 2017: 4). In this sense, ‘every city is structurally implicated in an unsustainable metabolism (via its economy and population’s way of life)’ and consequently ‘all cities, by degree, are broken and in need of repair – this is not to reinstate their past but to cope with the future’ (Ibid : 60). ‘Metrofitting’ is presented by the author as ‘redirective, reparative and reconstructive action to transform what relationally exists (materially, operationally and socio-culturally)’ in such a way as to counteract ‘the convergence of numerous “defuturing” impacts (like climate change, population pressures, geopolitical instability, resource stress, and social and individual technologically linked cultural transformations)’ (Ibid.: viii). Within this framework, Fry invited us to think of the ‘process of repair’ as a process that does not just mend and reinstate ‘what things originally were but futurally redirects them to be able to deal or adapt to emergent conditions’ (Ibid: 4).

We do not have the space within the confines of this contribution to present Fry’s perspective in detail, however we would like to highlight the fact that Fry also rejected ‘the promise of a “how-to book of answers”’ and embraced the complexity of the task of the socioecological transformation of human settlements, which implies a radical ‘remaking’ of planning. Planning has to become ‘more socially relationally engaged, perceptive and dialogical and less bureaucratic, instrumental, developmentally orientated and gesturally consultative’ (Ibid: 139).

A similar approach emerged in the reflections of the urban sociologist Richard Sennett (2018), who also recognized that the notion of repair could be key in the way we think about cities faced with the challenge of resilience in the context of climate change. In particular, Sennett distinguished three practical ways to ‘make a repair’: restoration, remediation and reconfiguration. In restoration, the goal is to erase the trace of damage and remake everything as new. In remediation, the goal is to intervene in such a way that there is an improvement in performance but without changing form or function. In reconfiguration, the condition of

brokenness and ruin is an opportunity for recreation, starting from what exists, in terms of both form and function. According to Sennett, the perspective of repairing takes us ‘closer to understanding resilience’ (Sennett 2018: 289). In his opinion, when repairing processes include a ‘reconfigurative’ purpose, they make the need for a change in the established frameworks of making the city visible and open to public discussion.

Both these studies invite us to think about recovery through the prism of a ‘design-based approach’, where design refers to ‘a particular approach to organizing experts and publics in planning for complex, large-scale infrastructural projects’ (Collier et al. 2016). Post-disaster decision-making processes can then be approached in terms of ‘wicked problems’ that require ‘a series of improvised decisions and choices rather than those based on proven solutions’: ‘wicked problems form an integral part of the society that generated them, thus their resolution requires change at societal level’ (Lee 2015: 110).

As discussed by Manzini (2015: 1), this perspective stems from the idea that a world facing multiple systemic crises is ‘a world in which everybody constantly has to design and redesign their existence, whether they wish to or not, a world in which many of these projects converge and give rise to wider social changes, a world in which the role of design experts is to feed and support these individual and collective projects—and thus the social changes they may give rise to’. This perspective encourages due attention in disaster research to the various grassroots forms of ‘design activism’ (Fuad-Luke 2009) that can emerge in post-disaster situations, which are understood as forms of practical engagement in repairing and reconstruction processes that take shape in affected communities.

This type of activism came to the fore, for example, in the case of the Central Apennine earthquake in Italy, a series of high-intensity seismic events that began with the earthquake of 24 August 2016 and that resulted in the destruction of the town of Amatrice and the loss of 235 lives. In this region, a movement called the ‘Active Solidarity Brigades’ (*Brigate di Solidarietà Attiva*), which had emerged in the aftermath of the disastrous earthquake in L’Aquila in 2009, promptly took action in this new crisis situation. These ‘brigades’ are grassroots groups that intervene in emergency situations by actively promoting solidarity initiatives and self-management support activities among the population in question based on the model of the early-twentieth-century mutual aid organizations. In the aftermath of the Amatrice earthquake, this grassroots mobilization supported the design and self-construction of emergency housing solutions suited to the mountain context to allow farmers in the area to continue to take care of their fields and animals, which would otherwise have had to be

abandoned. More generally, in an already critical situation of rural abandonment in the Italian territory, this mobilization counteracted the further abandonment of the mountains of this region that was being precipitated by the handling of the emergency. These groups also promoted a collective, self-managed research experiment aimed at the bottom-up production of critical knowledge on the management of the post-earthquake situation (the *Emidio di Treviri Project*, see Olori and Menghi 2019). This research, which has received no external funding, involves a broad national community of social scientists, architects, psychologists, urban planners, anthropologists, engineers and employment lawyers giving their time on a voluntary basis. Most importantly, the research directly involves researchers living in or near the disaster area. It has not been given an expiration date but still continues in the form of a permanent observatory. This experiment, although not truly replicable in other contexts and not without criticality, is a worthy example of how research on disasters can be conducted in a way that actively includes local populations in the design not only of practical interventions of repairing but also of research activities on recovery.

We have already discussed, in the introductory chapter, the limitations of interpreting resilience as an individual capacity to respond to change in a creative way. Similarly, from the perspective of design activism we are discussing here, if the structural conditions of vulnerability and subalternity are disregarded, the call for bottom-up practices of reconstruction and repair are at risk of turning into just another empty slogan.

An increase in these design activism initiatives is desirable, if only to serve as proof of the real possibility of turning recovery processes into processes of democratic empowerment, social change and sociotechnical innovation. However, the rise of these ‘beautiful islands of applied cultural and socioeconomic wisdom’ (Manzini 2015: 26) would not be not enough to promote a change towards more just societies and more liveable environments for all, humans and non-humans alike.

From this point of view, the reflection elaborated by Arturo Escobar (2018), which was based on Latin American examples, concerning the possibility of ‘design under the conditions of repression and violence’ deserves careful consideration. At the heart of Escobar’s reflection is the idea of ‘autonomy-oriented design’ as an expression of a ‘design from the South’ (see also Kalantidou and Fry 2015), which was understood as design ‘stemming from communal worlds, where each community would practice the design of itself on the basis of local, decolonial knowledges’ (Escobar 2018: 206).

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Further research as well as experimental practices to test a repairing perspective are needed to further develop the approach that has been outlined in this book. The volume points to an understanding of recovery as one that is oriented towards supporting the capacities of communities to repair and ‘reconfigure’ broken socio-ecosystems through autonomy-oriented design within a broader framework of commitment to facilitate the structural transformations that are needed to counter the ‘defuturing’ systemic processes that continue to feed fast and slow disasters (Fry 1999).

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<sup>i</sup> See for a synthesis of this literature Smith, Martin and Wenger (2018); see also Mayer (2019).