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The role of local communities in a global risk landscape

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Chapter 7

(Key Priority 3, UNISDR, 2015)

“Investing in Disaster Risk Reduction for resilience”

We reflect on what happened in L'Aquila, Italy, in the recovery operations following the 6 April 2009 earthquake. Previous critiques have focused on the actions of the Italian government and Department of Civil Protection, with little research on the role of local authorities. We shed light on how local authorities used emergency powers, command-and-control, and top-down planning to manage disaster rubble, implement safety measures, and allocate temporary accommodation. We discuss how these arrangements constituted the mechanism by which disaster capitalism took hold at local and national levels. We describe how this mechanism violated human rights, created environmental and social impacts, hindered local communities from learning, transforming, and building resilience, and facilitated rent-seeking, elite capture, organised crime infiltration and disaster capitalism. To make the Disaster Risk Reduction and resilience paradigm more effective, a shift from centralised civil protection to de-centralised, inclusive community empowerment systems is needed.

The mechanism of disaster capitalism and the failure to build community resilience in post-disaster situations: Learning from the L'Aquila earthquake

Introduction

Since the 1980s, various international declarations have promulgated a disaster risk reduction (DRR) and resilience paradigm that should be the basis of disaster agencies in all countries (UNDRO, 1982; INDNR, 1994; UNISDR, 2005; 2015). The DRR and resilience paradigm advocates reducing vulnerabilities and risks and building community resilience at all phases of disaster management (IFRC and RCS, 2004; UNISDR, 2007; Benson and Twigg, 2007; UNISDR and UNDP, 2007; DfID, 2010; UNDP, 2014). Post-disaster interventions should be windows of opportunity to enhance resilience and build back better not only damaged housing and infrastructure, but also local communities (Quarantelli, 1998; Perry and Quarantelli, 2005; Benson and Twigg, 2007; World Bank, 2009; Hallegatte et al., 2017, 2018). Understanding how to include community resilience-building strategies in the design and implementation of post-disaster interventions should be a key priority of disaster management agencies.

For effective DRR and resilience outcomes, there must be transformative, co-produced knowledge concerning the multiple dimensions of disaster risks and impacts (Tierney and Oliver-Smith, 2012; Imperiale and Vanclay, 2019a). To build community resilience and enhance inclusive social learning and socially-sustainable transformation, such knowledge should be capable of accompanying planned interventions from before conception (Imperiale and Vanclay, 2016b). There must be transparency and accountability, genuine community engagement and empowerment, effective coordination of multiple stakeholders, with the role, needs and priorities of local communities being fully recognized and respected (DfID, 2010). Social and environmental impacts of post-disaster interventions, and harms to the human rights of affected communities must be avoided. The individual and collective capacities, emotions (e.g. empathy), attitudes (e.g. social responsibility), actions and behaviours (e.g. mutual aid) conducive to social learning and transformation must be engaged and strengthened (IDNDR, 1994; UNISDR, 2005, 2015; Benson and Twigg, 2007; Jha, 2010; Imperiale and Vanclay, 2016a, 2016b). Over 30 years, social science literature in disaster studies has underlined that post-disaster interventions exacerbate the inequities that characterise affected local communities worsening social exclusion and failing to enhance social learning and transformation (e.g. Oliver-Smith, 1977, 1990; Bates, 1982; Bolin and Bolton, 1983; Cutter et al., 2006; Gunewardena and Schuller, 2008). Too often, the way post-disaster interventions are carried out by states, disaster management agencies exacerbates pre-disaster vulnerabilities, the root causes of disasters, and associated disaster risks and impacts, with disasters being seized upon as opportunities for disaster capitalism (Klein, 2007; Escaleras et al., 2007, 2016; Gunewardena and Schuller, 2008; Owen, 2011; Faas, 2016; Schuller and Maldonado, 2016; Pyles et al., 2017; Lewis, 2018; Lowenstein, 2018).

Naomi Klein (2005) coined the term 'disaster capitalism' to explain the deviant behaviour of the unscrupulous individuals and organisations that extract private advantage in disaster situations. This adverse behaviour is condoned and often facilitated by institutional arrangements and neoliberal logic (Gunewardena and Schuller, 2008). The term is widely used and frequently invoked in analyses of disaster interventions (e.g. Loewenstein, 2015; Yamada et al., 2018; Yee, 2018). Schuller and Maldonado (2016, p. 62) considered disaster capitalism was the "instrumental use of catastrophe ... to promote and empower a range of private, neoliberal capitalist interests". However, little effort has been made to describe and analyse: (i) the institutional mechanism by which states enable disaster capitalism to become implemented at the local level; (ii) the social risks that enable it to emerge at all levels of society; (iii) the worldview that accompanies it; and (iv) the consequences it has on local communities' capacities to collectively learn, transform and build community resilience.

In this paper, we analyse the disaster recovery following the 6 April 2009 earthquake in L'Aquila (Italy), and more specifically, how the command-and-control approach, emergency powers and top-down planning were used by local authorities. These were the institutional and financial strategies (in other words, the mechanism) used by the Italian state to organise post-disaster interventions in the L'Aquila affected area. This mechanism distorted the normal physical planning, community participation and risk management approaches of democratic governance. We reflect on how this mechanism enabled disaster capitalism to emerge at all levels of society, rather than facilitating inclusive social learning, transformation and building resilience. In contradiction to the international DRR paradigm, top-down, military-type arrangements were implemented after the L'Aquila earthquake, disrupting local governance, exacerbating local vulnerability to future disasters and endemic risks (e.g. rent-seeking, elite capture, corruption, inequity, social exclusion, public debt, organised crime infiltration), and led to a failure to build local community resilience. We describe how this happened by looking at three topics: disaster governance arrangements; the business of safety and rubble; and the establishment of a housing fund called the AQ fund.

Methodology

This paper is part of a larger research project that examined the social dimensions of the 6 April 2009 L'Aquila earthquake and the post-disaster interventions carried out by the state and civil protection authorities at each disaster management phase. The primary author is an Italian citizen who was born in L'Aquila and was resident in the L'Aquila region for most of his life. He was present in L'Aquila city on the night of the earthquake and lived in the L'Aquila mountain province for seven years following the earthquake. The larger project used a wide range of methods including: action research; auto-ethnography; ethnography; participant observation; fieldwork discussions; fieldnotes; field interviews; focus groups; public forums; blogging; surveys immediately following the 2009 earthquake; document analysis of all relevant documents; a media analysis of reporting about the earthquake and its aftermath; 37 retrospective in-depth interviews with key informants; and over 250 interviews with people in local communities undertaken between 2009 and 2018. This paper draws on these methods, especially on 20 in-depth interviews that specifically addressed the topics discussed in this paper.

The 20 interviews were conducted in 2013 (5) and 2017(15) with local people who were knowledgeable about what happened in the L'Aquila region after the earthquake, and were willing to speak frankly about their experiences. They included a councillor from L'Aquila City Council; the Mayors of two mountain villages; six local experts, including three seismologists with key roles in local DRR strategies, a lawyer representing the families of victims, an engineer in charge of the vulnerability reports made before the April 2009 earthquake, a local technician in charge of various rural development programs in the region; and 11 people who emerged as spokespersons for their various communities. These interviews were recorded and transcribed. Informed consent was obtained and other principles of ethical social research were observed (Vanclay et al., 2013). Including the perspectives of these interviewees helped us to consider the multiple points of view of key local actors. To avoid formulaic responses, it was decided not to interview people who were strongly associated with: the leading political parties; key protest movements; or disaster management agencies. We also analysed government and civil protection ordinances and decrees issued by the then President of the Council of Ministers, Silvio Berlusconi, and the then Chief of the national Civil Protection Service, Guido Bertolaso. We focused on how these ordinances provided local authorities with emergency powers and derogation from ordinary laws and anti-mafia controls. We also analysed mayoral ordinances and decrees related to safety measure implementation and demolitions, and the initial post-disaster reconstruction policies and interventions.

The L'Aquila earthquake of 6 April 2009

At 3.32 in the early morning of 6 April 2009, a 6.3 Mw earthquake devastated the City of L'Aquila and more than 80 villages in 57 municipalities, killing 309 persons, injuring 1,500, and rendering 70,000 people homeless in the affected area, which became known as 'the crater'. A massive recovery operation was effected, and many elaborate schemes were implemented. Restricted areas (red zones) patrolled by the military were established almost immediately, excluding people from the town centres. By the evening of the 6 April, the Italian Department of Civil Protection (DCP) decided they would evacuate the crater, which was publicly announced by radio early 7 April. In a few weeks, the population became split between the tent camps near L'Aquila (35,856 people) and hotels and other accommodation along the Abruzzo coast and other cities of Abruzzo (30,124 people). While people were locked out of the historical city centres and scattered along the Adriatic coast and tent camps across the crater, the temporary housing scheme (the CASE project) was implemented, disaster rubble was managed, and many private building firms carried out interventions on public and private buildings, including demolition and shoring-up solutions, without gaining the consent of homeowners or inhabitants and violating the human right to property and people's right to participate in the reconstruction of their homes, villages and landscapes (Imperiale and Vanclay, 2019b).

The recovery process has been severely criticised (Frisch, 2010; Alexander, 2010, 2013, 2019; Calandra, 2012; Ozerdem and Rufini, 2013; Contreras et al., 2017; Imperiale and Vanclay, 2019b), including by an European Parliament inquiry (Søndergaard, 2013), which considered the misuse of the €493 million provided by the European Union. Eleven years after the earthquake, L'Aquila is still a crater, the red zones are still in place, and over 10,000 people still live in temporary accommodation (Barabino and Sansa, 2019).

Declaration of a state of emergency, emergency powers, and the new governance of the crater

The L'Aquila earthquake occurred in the early morning of Monday 6 April 2009. Within hours of the earthquake, Prime Minister Silvio Berlusconi declared a State of Emergency, which provided the DCP with emergency powers, specifically the power of injunction (i.e. to issue ordinances on behalf of the government) and the power of exception (i.e. the derogation of ordinary rules and requirements). Shortly after dawn, the DCP established their local headquarters in L'Aquila (at the Finance Police building in Coppito) and created a Directorate of Command and Control (DICOMAC) to manage the emergency. Through various legal measures – including Ordinances of the Presidency of the State, Ordinances of the Presidency of the Council of Ministers (OPCM), Law Decrees, and Civil Protection Decrees – emergency powers were deployed without any need for review by Parliament. The DCP had access to the Civil Protection Fund, an emergency fund that can be drawn upon whenever a State of Emergency is declared. There was very little control over use of the fund, and it was automatically topped-up (Law n.225, February 24, 1992, art.5). In effect, this gave the DCP relatively unrestricted access to funding. For the three years the State of Emergency remained in place, all disaster-related actions and many other actions implemented under the guise of the disaster, including attempts to initiate reconstruction and stimulate the economy, were conducted in the absence of normal restrictions and controls, in complete disregard of the norms usually applied to public administration, contracts, outsourcing and public procurement, and with a complete lack of accountability and transparency. The command-and-control approach used by the DCP did not require any engagement of local communities or their elected councils, and only the local mayors and their trusted technicians were consulted, by-passing the elected local councils.

As the councillor said:

“The Italian Constitution ... substantially became waste paper, in that ... the whole structure of government of the L’Aquila territory was completely overridden. ... The municipality’s Board was never convened, the local council was rendered invisible, was irrelevant, it was cancelled. And this also relates to the relationships local councillors had with DICOMAC. When a local councillor or Board Member would introduce oneself to a DCP official, the DCP official would not acknowledge any role for that person because the territory was managed only by DICOMAC”.

The elections for the L’Aquila provincial government and other councils of the crater (which would have been held on 6 June 2009) were initially postponed to late 2009 and then to March 2010. An ordinance of 15 April 2009 (OPCM n.3755, art.7, subpar.1 and 2) gave the President of L’Aquila Province, Stefania Pezzopane, authority to executively implement urgent measures. What comprised an urgent measure was not well defined, and this power was applied to a wide range of activities, including what the Province is responsible for in normal situations. For example, this power was used to push through construction of a controversial bridge (Alexander, 2010). The Law Decree n.39 allocated €200 million to ANAS spa, a state-owned road construction company under the control of the Italian Ministry of Infrastructure and Transport, and €100 million to the Italian Railway Network (RFI) to implement actions considered necessary for the regional reconstruction process that were within the framework previously established by Program Agreements signed before the earthquake. Surprisingly, ANAS spa obtained the same emergency powers ‘to restore with maximum urgency the ANAS offices in L’Aquila’ (OPCM n.3755, art.14).

In contrast to the elected councillors, the President of the Abruzzo Region, Gianni Chiodi, and the mayors of the affected municipalities were given enlarged powers. Providing that they deferred to the DCP, they were entitled to (OPCM n.3753, 6 April 2009):

- (i) commandeer those movable and immovable assets needed to provide refuge and recovery to local inhabitants and purchase all assets and materials needed for local people’s sustenance and initial provisional interventions (art.1, subpar.1);
- (ii) identify those structures that could provide adequate refuge to earthquake victims (art.1, subpar.2);
- (iii) implement any urgent or necessary activities to remove situations of danger and to ensure essential assistance to the affected local population (art.1, subpar.3);
- (iv) establish groups of technicians in each municipality to assess the structural vulnerability of public and private buildings that are totally or partially uninhabitable, or that are not restorable and to be demolished (art.2, subpar.1); and
- (v) gather the building damage assessments and issue ordinances for demolition (art.2, subpar.2).

In Law Decree n.39 (28 April 2009), the authority of the President of the Abruzzo Region, Gianni Chiodi, was further expanded and he was appointed Delegated Commissioner (*Commissario Delegato*) and was in charge of implementing urgent interventions (art.4, subpara.2), especially concerning the identification of landfill sites for rubble disposal (art.9 subpar.8) and the reconstruction of public buildings, including churches and other cultural heritage properties (art.4 subpar.1b). He was supported by the Office of Public Works of the Ministry of Infrastructure and Transport (*Provveditorato Interregionale alle Opere pubbliche*). The local mayors were given responsibility to coordinate and implement the removal, transport and disposal of rubble, and to identify new disposal sites.

Although intended to be an entity to provide coordination only for the period of an emergency, DICOMAC continued to operate until February 2010 (i.e. 10 months after the earthquake) at which time its responsibilities and authority were taken over by the Abruzzo Region President,

Gianni Chiodi, and the L'Aquila Mayor, Massimo Cialente, who respectively became Delegated Commissioner and Deputy Delegated Commissioner for reconstruction (OPCM n.3833, art.1 and 2). A Strategic Technical Office (*Struttura Tecnica di Missione*) (STM) was created to provide technical support and institutional coordination to continue the activities initiated by the DCP and to respond to the on-going needs associated with reconstruction. Gaetano Fontana, who was President of the National Association of Building Firms (ANCE), was controversially appointed STM coordinator (Abruzzo24Ore.TV, 2009). STM came into force in February 2010, and was supported by: an office for the management of the emergency (STGE, *Struttura Tecnica per la Gestione dell'Emergenza*); a techno-scientific committee; an office for external coordination; and the Office of Public Works of the Ministry of Public Infrastructure and Transport.

The STM structure raised many concerns about its cost and lack of transparency (Orsini, 2011). Polemics arose because the STM imposed the design and implementation of reconstruction plans on local municipalities. These plans were mostly developed by various Italian universities directly appointed by the mayors under controversial circumstances. Because of suspicions of bribes and corruption, this led to a legal inquiry, with Fontana resigning in January 2012 (Nardecchia, 2012). From the perspective of local people, the shift from DICOMAC to STM did not lead to any fundamental change. During the period STM was in charge, the views of the L'Aquila council were still not considered, as the councillor explained:

“The local council produced urban planning documents that were separate and different to those produced by Fontana’s office. Nevertheless, those produced by Fontana, STM or DICOMAC were adopted by national decrees issued by Prime Minister Berlusconi or the President of the State, but those produced by our Council were not even taken into account”.

The State of Emergency lasted for three years, an extraordinary long period (Venice Commission 1995; Khakee, 2009; Imperiale and Vanclay, 2019b), but many decisions taken under this regime (e.g. about demolitions, safety measures, and construction of infrastructure) continued to be implemented for years afterwards, usually under emergency procedures. The actions of the regional and provincial leaders, and the day-to-day operations of the municipal governments were not publicly disclosed or monitored, and were covered by state secrecy provisions. As the local councillor explained:

“After 2009, the municipality of L'Aquila stopped producing any financial statements. At the end of every year, the State simply covered any deficit. The local council would say to the State something like *'this year we had costs of €30 million for wages, maintenance etc'*. Without needing to provide a formal budget, the Council would produce a summary of the money spent, and ask the money from the State. Up until last year [2016], the government has always written off our shortfall”.

A controversial aspect about declaration of a State of Emergency in Italy is that it also leads to the suspension of procedures relating to control of mafia organisations. Italy has a long history of trying to control the mafia, with the National Anti-Mafia Department (DNA) being established in 1991. Over time, anti-mafia controls have become stricter and since 1991, any firm wishing to tender for public works required an Anti-Mafia Certificate (Ferraro, 2012; Europol, 2013). There were stiff penalties for engaging firms associated with the mafia. Since the mafia had a high presence in the construction industry, the controls were especially (but not exclusively) directed towards the building sector. The controls required that no employee have any affiliation with the mafia and that the names of all employees and their possible links to mafia organisations be provided to the authorities.

With the implementation of the State of Emergency, the anti-mafia requirements were initially suspended. In response to journalist questioning, a decree (Number 39, art.16) was issued on 28 April 2009 to reinstate the anti-mafia provisions. However, unlike all other decrees which applied immediately, the anti-mafia provisions only came into force three months later. This was too late, safety measures, shoring-up, demolitions, temporary housing solutions and rubble removal,

transport and disposal were already being implemented. At least five firms with known mafia connections had already been engaged (Galullo, 2009; Postiglione, 2010; Libera, 2010). The European Parliament inquiry (Søndergaard, 2013), the National Anti-Mafia Department (*Direzione Nazionale Anti-Mafia*, DNA) (DNA, 2016), the Parliamentary Commission of Inquiry into the Mafia (Bindi, 2018), and many other legal inquiries conducted by the L'Aquila Prosecutor's Office confirmed that there was extensive mafia infiltration, as well as many irregularities and crimes against public administration, including fraud, corruption and bribery (Alexander, 2013; Imperiale and Vanclay, 2019b).

The business of safety and rubble

The earthquake damaged over 34,000 buildings to some extent, while some 37,000 buildings had no damage of consequence. The damage ranged from minor to severe. In some cases, buildings were reduced to piles of rubble, or were damaged to such an extent it was considered not practicable for them to be repaired. Some buildings arguably posed a safety threat, which ostensibly was the reason for the creation of red zones. Immediately after the earthquake, quick decisions had to be made about whether each building could be used or not. Severely-damaged buildings that posed a safety risk were slated for demolition. The process of demolition or shoring-up buildings took place over many years, but was heavily concentrated in the first months.

The first demolitions were made within days of the earthquake. They were made under rather unusual circumstances. On the day of the State Funeral (10 April), it was announced that a legal inquiry would be commenced to identify the contribution of building failure in relation to each of the 309 deaths. Almost immediately demolition teams moved into the red zone to remove any incriminating evidence. The rubble was transferred to Piazza d'Armi, an underutilised military area close to the city centre, where a rubble pit had been established. Here, two gravel crushers were at work destroying the evidence (Libera, 2010). It took several days before the prosecutor became aware of this rubble removal and issued an injunction to stop it. The buildings already under legal inquiry were taped off to protect the evidence within. It might be rhetorically asked: *Why did the military patrolling the red zone allow access to the demolition teams to demolish buildings and remove rubble? Did an official give them legitimate authority? And if so, who and why?*

The extent of damage from the earthquake meant that there was a mountain of rubble that had to be managed, perhaps 3 million tonnes (Gabrielli et al., 2018). Streets had to be cleared, and damaged buildings needed to be restored. Rubble was a significant issue in many ways. Rubble management creates environmental and social impacts, therefore disaster waste should be carefully managed to protect public health and the environment (USEPA, 1995, 2008). In Italy, however, waste management is highly problematic due to infiltration of organized crime, and because there is no disaster rubble management protocol (Gabrielli et al., 2018). Law Decree n.39 (art.9) allowed disaster rubble management to be conducted in Abruzzo without regard to the environmental management procedures normally required, such as environmental impact assessment, assessment and monitoring of risk, safety measures, protection of groundwater at waste disposal sites, and public health and safety standards. Law Decree n.39 (art.9, subpara.1, 1-bis) established that all rubble would be considered normal urban waste, including biohazardous sewage from the portable toilets in the tent camps and the rubble from collapsed buildings, even though the rubble would have contained high levels of asbestos and other contaminants (Gabrielli et al., 2018). Law Decree n.39 (art.9 subpara.5) also allowed effectively anyone to open new waste disposal sites, in contrast to the normal procedures governing fitness of an operator as defined by the national registry of environmental professionals, which, among other things, seeks to prevent mafia infiltration. It suspended the ability of the Region and

Province to require mitigation of risk, implement monitoring, or shut down dangerous operations. Furthermore, Law Decree n.39 (art.6 subpara.4-bis) suspended mitigation and monitoring requirements for water basin and river protection for the whole of the Abruzzo region.

It might be considered that the presence of rubble would be a vivid reminder of the earthquake, and that a first step in return to normalcy would be the removal of rubble. However, an alternative perspective is that the rubble is potentially useful for reconstruction. Given the historic nature of some houses, the rubble was potentially valuable. The rubble that might be regarded as rubbish or hazard by some can be prized possessions full of sentiment for local people. People's attachment to their houses and the materials that comprised their houses is a driver for participatory reconstruction and for enacting inclusive social learning and socially-sustainable transformations towards reducing vulnerabilities and enhancing DRR and community resilience. Elsewhere, resident involvement in the selection and storage of building materials that could be reused have led to community building in the reconstruction process (Denhart, 2009). A recent application of the Social Impact Assessment Framework for Action (Imperiale and Vanclay, 2016b) showed how participatory waste management strengthens local community resilience (Little, 2017).

In the crater, however, the risk of mafia infiltration in waste management was high, even before the earthquake (Saviano, 2009; Galullo, 2009). The derogations to normal requirements transformed rubble into an avenue for rent-seeking, organised crime infiltration and disaster capitalism, rather than for participatory reconstruction or building back better more sustainable and resilient societies. The demolition firms were paid for the removal of rubble, and they also benefitted from sale of the rubble. Demolitions were carried out without adequate care regarding the private belongings of inhabitants, including building materials that could be reused (e.g. historic stones and planks). For example, in one interview, an old woman lamented that, while the demolition firm was demolishing her house without her knowledge, her historic door, which had been handmade by her grandfather, was taken away. According to eye-witness accounts, the haste at which demolitions were conducted and rubble removed was evident in the extent to which personal effects were present amongst the rubble.

In May 2009, the L'Aquila Mayor nominated a site for rubble storage, a quarry owned by local construction firm, Teges and Palmerini. The Mayor agreed to pay €10 million (Libera, 2010). However, other firms contested this agreement and a legal inquiry was initiated, which led to it being rescinded. The DCP intervened and restored the contract (Libera, 2010). The contract was surprising because of the amount of money involved, the lack of transparency about the arrangements, a lack of proper procedure in relation to the awarding of the contract, and because of the building firm's alleged links to the mafia (Libera, 2010).

The first actions in relation to buildings in the red zones concerned technical surveys for evaluating the *agibilità* (habitability/liveability) of damaged buildings. The criteria for assessing habitability, which were established as a consequence of previous earthquakes, were reiterated in Ordinance n.3753 of 6 April 2009. Thousands of professionals coming from all over Italy registered as DCP volunteers, organized themselves into teams, and began to conduct DCP surveys assessing habitability. Separately to the habitability assessments, the local mayors established technical teams to identify the buildings that needed safety measures. The mayors and their technical managers directly appointed firms to design and implement safety measures. In less than 6 months after the earthquake, the whole red zone of L'Aquila city was put into safety. The red zone was carved-up into districts and assigned to various influential building firms. As a key informant told us:

"In the L'Aquila red zone, in the first 6 months after the earthquake, shoring-up solutions were implemented on almost all buildings ... They [the technical teams] determined the buildings that needed to be put into safety, but, practically, it was ... almost all buildings ... Then, the local

municipality assigned a different zone of the city centre to each of its 'friends'. Yes! The city was literally split up into different zones so that, if one had to make a map of the city, it would have shown the city divided into these different zones, enabling the construction firms to work comfortably [said with a laugh to imply without interference or oversight].”.

The L’Aquila red zone was put into safety with impressive quickness and in the form of a reward or gift to influential local building firms, as the local councillor said:

“When the process of reconstruction was about to start, the Civil Protection decided to make the big local building firms happy because [in the temporary housing scheme the beneficiaries mostly were external building firms]. ... it was clearly time to give something to the local entrepreneurs, building firms etc., who obviously were pressuring the local political representatives”.

Safety measures were implemented through mayoral ordinances, and were managed by the technical directors of the councils. As the councillor stated:

“[the Director of Public Works] could appoint private companies just with a phone call. ... After a while, this system created suspicions so he decided to establish a ‘white list’ of acceptable building firms. Every firm that wanted to be included had to present an anti-mafia certificate ... he established a time schedule for each assignment. This was true, but, the problem was that, for example, to <Company A> he gave an assignment for €80,000, to <Company B> an assignment for €160,000, and to <Company C> an assignment for €3 million. He would contact <Company C> again for another intervention. If you tried to say, *Look, Company C already got the money for the last job*, he replied, *Yes, but Company D refused and I know that Company C can do a good job, so I appointed them*. It was clear that this was improper conduct [*un mercato indecente*], however it was a business accepted by everyone. So much so that, during the trial, to defend himself, he said: *in front of my office door there were queues of local councillors who were there to ask me to put this or that building firm on our short list*”.

Legitimised by mayoral ordinances, the building firms were in control and could design and implement safety measures without community engagement or public oversight, something which enabled excessive interventions to be applied. As a key informant confirmed:

“That there was a general misuse of the safety measures applied to public and private buildings in the whole crater is a matter of fact. Shoring-up solutions and demolitions were disproportionate, some were totally wrong. They destroyed people’s houses that were supposed to be put into safety. They broke the interior of the buildings even their furniture. They stole everything they could from inside the homes. And this was the result of the lack of control over the whole operation. Or the intentional lack of control. ...
Interviewer: How did the building firms get appointed?
Interviewee: Do you want a true answer? Friends of friends, this was the way it worked”.

Building firms could get access to buildings while the owners were locked out of their homes and forced to live in emergency conditions hundreds of kilometres away. The red zones of all villages were delivered into the hands of private building firms, and work on private buildings was implemented without any engagement with inhabitants, without allowing inhabitants to access their buildings, or to exercise decisions relating to their property and its future. As an inhabitant said:

The big damage to our village was caused by the building firm that carried out shoring-up solutions ... Our problems began when the building firm arrived ... I had to come back from the Adriatic coast to monitor what they were doing, because from the hotel [on the coast] I could not monitor the situation. ... It was only pure coincidence that one day I came back to my house and found a worker putting seals across the entrance – the door to my home, you understand? With all my stuff inside! ... I asked, *Excuse me, who can explain what is going on?* One person told me: *We are implementing shoring-up solutions on the houses, we are making the buildings safe*. And I told him: *Sorry, that is my home, I have many things inside and you are now closing off the entrance so that I cannot get in anymore!* ... He asked me how my home was classified. When I replied ‘E’ [uninhabitable], he said to me: *‘E’; then sorry, but you cannot do anything*. I answered back, *‘E’ does not mean expropriated, you cannot expropriate my home. The house is mine, you must contact me. I left my telephone number on the door!*”

Concerning the way in which the building firms implemented shoring-up solutions, she reported:

“Once, I hid under a crane, they could not see me but I could see them. I could see how they were conducting their operations implementing their shoring-up solutions. I saw how they put tie-rods on the damaged houses of our village. They used to make, not holes, but chasms inside walls, and while one worker was saying ‘*Take care!*’, the other one, who was leading the operation, was screaming to him ‘*Who cares? Come on! Pull!*’ I could see how they carried out these operations, the violence, the aggression, and the hatred they used to further destroy the houses. Such vandals, vandals! Believe me, it was horrible ... They wanted to get themselves more work, beyond what they already had. Thus, day by day, they got themselves more work on private buildings that did not need any safety measures, but they did shoring-up solutions anyway. ... This building firm occupied our village for two long years. They were donkeys amongst us, they behaved like animals, they mocked us, they laughed in our faces. They were the owners of the village. When they finally went away, only then did I feel safe”.

Over time, many scandals emerged from the safety implementation. There was no monitoring of design or implementation, as well as over how the contracts and sub-contracts were assigned. As confirmed by a senior police detective:

“During the six months following the disaster, we clearly made a mistake. All our efforts were focussed on the inspections we were instructed to do regarding likely criminal organization infiltration in the new CASE buildings. We did not take into account that there were entire city centres that were declared red zones in which building firms and sub-contractors were at work undertaking demolition and implementation of safety measures and shoring-up solutions ... All our efforts and inquiries focussed on the CASE project, that’s why our inquiries about crimes against public administration concerning safety measure implementation only emerged years later”.

A local online newspaper reported that a legal inquiry into the implementation of safety measures, *Do ut des*, had identified an intricate system of corruption involving ad hoc consulting firms to which building companies made payments (Orsini, 2016). Rather than the classic overnight bag stuffed full of cash, the bribes of the new millennium were electronic payments to personal firms for alleged consulting advice. It was evident from the inquiry that unrestricted access to funding and a complete lack of monitoring were ideal conditions in which corruption could flourish. In L’Aquila, the extent to which safety measures were implemented and the quickness of these operations were phenomenal. As the councillor told us:

“Corruption also happened in Umbria. If one talks with those building entrepreneurs who were there, they understand that safety measures implementation was a system of corruption. Here [in L’Aquila], it was the same. The difference was in the amount of money spent, because in Umbria they spent little money, while here the cost of safety measures was extreme, also because the whole of L’Aquila city centre was put into safety. This was without any oversight. Thus, if this apartment had to be put into safety, and €20,000 of building materials were sufficient, the building firm would put in €40,000 of materials and no one controlled it or asked why €40,000 of building materials were put in, while €20,000 was sufficient”.

Up to August 2012 when the State of Emergency ended (and even afterwards), local municipalities considered demolition and safety measures urgent actions that could be carried out without informing the homeowners. Far from putting buildings into safety, the process of implementing safety measures caused considerable delay to the start of reconstruction, further marginalizing local communities from their properties and right to decide about their future, and exacerbating local social risks and vulnerabilities. In January 2018, two local building firms were convicted of crimes against public administration relating to the work they undertook in the local barracks during the State of Emergency. The verdict declared that there was no reason for the work to be done under conditions of urgency, and that the emergency procedures enabled the building firms to undertake irregular subcontracting, false invoicing, and fraud. These two firms were amongst the first to be contracted to implement safety measures, which led to much public discussion and eventually to a parliamentary inquiry. This inquiry was conducted because, immediately after the earthquake, the L’Aquila Mayor and other notable figures had been hosted

for several months in a resort owned by one of these entrepreneurs (Faz, 2010). As a result of the inquiry, this resort was confiscated (Redazione, 2015).

The AQ ethical fund, and the allocation of apartments

Prior to the earthquake, there were approximately 3,000 unoccupied apartments in the City of L'Aquila. A 1975 urban development plan had a population estimate for L'Aquila of around 160,000 people by 2010. This plan, the only one the city ever developed, encouraged local building firms to build speculative housing. Before the earthquake, there were enough houses for 100,000 people, even though there were only some 70,000 residents. Sometime after the earthquake, the local branch of the National Association of Building Entrepreneurs (ANCE) indicated to the DCP that the 3,000 empty apartments, which were largely undamaged by the earthquake and more-or-less ready for occupation, could be used for temporary housing. A government ordinance of 15 May 2009 (OPCM n.3769) gave the authorities power to expropriate buildings for temporary housing purposes. However, this ordinance provoked polemical outrage from the local building entrepreneurs who lobbied heavily leading to new arrangements, which we describe below. On 18 May 2009, a local businessman, Antonio Napoleone, was appointed as an advisor on the issue of housing and expropriation to DICOMAC, L'Aquila municipality, and the local prefecture. Napoleone negotiated a complex arrangement involving the establishment of a "real estate ethical fund for reconstruction" or AQ Fund. The AQ Fund would purchase the vacant apartments and rent them out to people displaced by the earthquake, with the rent being subsidised by the State, at least for some years, when the apartments would be sold off, potentially to the people who rented them. The fund would be guaranteed by the State, and the proposal began with promised capital of €100 million, 40% of which would come from two State-owned companies (Fintecna and Fimit), with the remaining 60% coming from a consortium of banks. The arrangement was facilitated by OPCM n.3789 of 9 July 2009 (art.5) which provided a State contribution of €30,000 per incomplete apartment to enable it to be made ready for use, and an additional €2,000 for furniture. The initial proposal would have seen 500 apartments bought (presumably at €200,000 each) and made available to displaced people. However, difficulties in gaining the capital meant that only 392 apartments were allegedly made available, although a subsequent inquiry revealed that only 350 were actually provided (Gianforte, 2018). The scheme drew a lot of criticism in the Italian media. As discussed by the councillor, the contentious issues included:

- lack of transparency and accountability around the whole operation, including financial arrangements;
- lack of a community housing assessment;
- the procedure by which people were chosen to participate;
- a perception that this scheme was capturing public funds to benefit local private firms and individuals.

"This so-called ethical real estate fund was supposed to have an ethical form. In reality, it was only a scam to utilise the many unsold buildings of some local building entrepreneurs. ... The proposal of this real estate fund actually came from local building entrepreneurs, but this was kept hidden for months. I say kept hidden, because you could not hear anyone talking about this fund. You could hear along the corridors of the local administration that *'they are doing this real estate fund'*, but no one really knew at that time what it really meant. When the first beneficiaries of this temporary housing scheme were announced, you could recognize that they were all the people in the city who had or have had power, obviously because having a proper home was more comfortable than sleeping in a hotel or a tent. The L'Aquila municipality – if we mean by it, its local council – did not know anything about the financial operation of this scheme. Only the local mayor knew about it and approved it. Because the AQ fund benefitted from a public contribution, and thus the monies it spent were public money, the local mayor should have said something. ... There wasn't any public ballot [or fair selection criteria] and when the names of the first beneficiaries came out, as I already said, they were all people of the high bourgeois of the city, or that had or have had power in the city".

Discussion: How disaster capitalism gets implemented

Above, we analysed how the Italian government provided local authorities with emergency powers to manage disaster rubble, make damaged buildings safe, and determine temporary housing arrangements. Extrapolating from our findings, below we reflect on how the top-down, military-type arrangements (emergency powers, command-and-control, and top-down planning) adopted by local and national authorities were the mechanism that facilitated rent-seeking, elite capture, organised crime infiltration and corruption, while enabled disaster capitalism to take hold.

The use of emergency powers

The emergency powers allowed national and local authorities to directly appoint suppliers to provide the goods and services needed for the emergency accommodation (food, portable toilets, etc). It also allowed them to directly appoint staff, consultancies and building firms to construct temporary accommodation, restore public buildings, implement safety measures and reconstruction plans, manage disaster rubble, and build new infrastructure. The use of emergency powers was deemed necessary because of perceived urgency and the intention to quickly end the emergency. However, instead of ending it, the use of emergency powers extended the emergency, allowing the elite to exploit the post-earthquake situation. This resulted in delaying reconstruction of the local physical and social fabric, and in extending the time people were compelled to live in emergency conditions, thus increasing harm in the short, medium and long term. Local communities were excluded from the reconstruction process, and their right to decide about the future of their properties, their villages, their city, and their affected landscape was disrespected.

The emergency powers granted national and local authorities with state secrecy provisions and derogations from ordinary law, including public procurement, anti-mafia controls, public health, and environmental safeguard regulations. Although no-bid contracts in previous disaster contexts were already criticised as avenues for disaster capitalism (Klein, 2007; Button and Oliver-Smith, 2008; Damiani, 2008), in L'Aquila the emergency powers enabled local and national authorities to make considerable use of no-bid contracts that facilitated the interests of influential building firms and entrepreneurs, exacerbated inequalities, and enabled elite capture and disaster capitalism to flourish. Many decisions taken under the regime of emergency powers continued to be implemented for years afterwards creating second disasters. The secrecy provisions, lack of disclosure, and derogations associated with the State of Emergency have served to hide dubious arrangements, disguise fraud and corruption, and further facilitated organised crime infiltration and disaster capitalism. As evident in the L'Aquila situation, it is clear that the use of emergency powers undermines transparency, accountability and effective community resilience-building strategies, leading to elite capture and disaster capitalism.

The command-and-control approach

In L'Aquila, use of emergency powers was accompanied by a command-and-control approach to resources, which led to suspension of the democratic functioning of local councils, with only the mayors, their trusted technicians and technical directors having a say in post-disaster interventions. The Presidents of the Abruzzo Region and L'Aquila Province, and the local mayors, embodied the command-and-control approach in the way they implemented their tasks, including the management of rubble, implementation of safety measures and demolitions, initial reconstruction, and infrastructure project implementation. A rigid command chain was considered necessary at the local level to decide how to spend money efficiently. However, rather than making the interventions and expenditure of public money more efficient, it facilitated

limited public oversight and participation, rent-seeking, elite capture, corruption, and organized crime infiltration. Instead of enabling inclusive social learning and socially-sustainable transformation, such a command-and-control approach failed to respect international disaster management principles, enabled disaster capitalism to take hold, and worsened local social risks, including inequity and social exclusion. By promulgating disaster myths, creating perverse opportunities, and failing to have adequate oversight mechanisms, the command-and-control worldview led to building a culture of disaster capitalism, with local people's positive emotions, attitudes, and behaviours being subverted. Empathy was turned into fear and suspicion; social responsibility into a gold rush and divinization of the commander-in-charge; and mutual aid into rent-seeking and elite capture (Imperiale and Vanclay, 2019b).

Top-down planning

The design of recovery operations in L'Aquila was led by a top-down approach to physical planning that was negatively influenced by the economic interests of national and local elites and did not acknowledge the social dimensions of these interventions. The top-down planning relating to emergency shelters, temporary housing, safety measures, rubble management, restoration of key public buildings, and the construction of infrastructure was accompanied by techno-scientific assessments and resulted in over-engineered actions that, rather than being solutions, created further problems, worsened local vulnerability to endemic risks, violated human rights, created social and environmental impacts, and further public debt. This top-down planning did not take into account the environmental and social impacts of the interventions or the human rights that had to be respected, further marginalising and fragmenting local communities, creating widespread conflict and discontent, while supporting the interests of national and local elites, and failing to build resilience. There was nothing in this system to prevent disaster capitalism from flourishing, instead there seemed to be very good knowledge how to enable the elites to hijack the interventions and allow disaster capitalism to flourish.

Conclusion

The response and recovery operations following the 2009 L'Aquila earthquake were carried out in a regime of command-and-control, emergency powers and top-down planning. These arrangements were the institutional and financial strategies that constituted the mechanism adopted by local and national authorities to implement post-disaster interventions. The authorities asserted that this mechanism was needed to avoid delays and ensure efficient outcomes. However, despite expenditure of around €22 billion (Finocchiaro, 2017), eleven years after the earthquake, the red zones still exist, and over 10,000 people still live in temporary housing (Barabino and Sansa, 2019). Reflecting on the L'Aquila case, and drawing on Klein (2005) and others (Gunewardena and Schuller, 2008; Loewenstein, 2015; Faas, 2016; Schuller and Maldonado, 2016), we define disaster capitalism as a broad multidimensional concept that relates to the deliberate perverse actions of self-interested elites to extract private advantage from disasters, as well as the mechanisms that facilitate these actions and protect the elites. Disaster capitalism happens at all levels of society and at all disaster management phases. The mechanism of disaster capitalism is constituted by cultural and institutional dimensions and includes: the deliberate distortion of information; the promulgation of disaster myths, particularly concerning local communities and matters of urgency; the use of emergency powers, command-and-control and top-down planning; police action and militarization; and the hijacking of post-disaster interventions. Disaster capitalism emerges from the pre-existing social risks and vulnerabilities, and facilitates rent-seeking, elite capture, organised crime infiltration and corruption, creating environmental and social impacts and human rights violations, further worsening local social risks (e.g. local inequity and social exclusion) and vulnerabilities in a downward spiral, while undermining the positive feelings, attitudes, and behaviours that enable members of affected local

communities to collectively learn, transform and build resilience (Imperiale and Vanclay, 2016a, 2019b).

The main lesson learned from the L'Aquila disaster is that crucial shifts are required in the way states typically conceive their institutional and financial strategies, and their approaches to physical planning, risk management and community participation. Following the paradigm shift from a war approach to considering the social dimensions of disasters (Quarantelli, 1998; Perry and Quarantelli, 2005; Oliver-Smith et al., 2017), there has been a switch from civil defense to civil protection arrangements (Alexander, 2002). However, as the L'Aquila case shows, this shift was not accompanied by any substantial change in the institutional arrangements or in the management and planning models. Even under a civil protection regime, disaster myths keep accompanying disaster management interventions, and emergency powers, command-and-control, and top-down planning keep being the mechanism used for disaster recovery and reconstruction operations. This mechanism facilitates disaster capitalism to take hold, instead than enhancing inclusive social learning and socially-sustainable transformation and building community resilience.

To enable the various United Nations principles and declarations about DRR and resilience to be more effectively respected and implemented in practice, the international community must pay more attention to the mechanism by which states conceive, decide, design and implement disaster management interventions. The DRR and resilience paradigm demands a paradigm shift from protecting vulnerable, affected communities to engaging and empowering their capacities to learn and transform; and thus from centralized, civil protection systems to inclusive, decentralized community empowerment systems capable of orienting investments and interventions towards reducing local vulnerabilities, and environmental and social risks and impacts; enabling and empowering social learning and socially-sustainable transformations; and building resilience at all levels of society before and after disasters.

References

- Abruzzo24Ore.TV (2009) 'Ricostruzione, la Cna contro la nomina di Fontana', in *Abruzzo24Ore.TV*, 21 October, 2009. Available at: <https://www.abruzzo24ore.tv/news/Ricostruzione-la-Cna-contro-la-nomina-di-Fontana/13304.htm> (accessed on 22 January 2020).
- Alexander, D. (2002) 'From civil defence to civil protection – and back again'. *Disaster Prevention and Management*. 11(3). pp. 209-213.
- Alexander, D. (2010) 'The L'Aquila earthquake of 6 April 2009 and Italian Government policy on disaster response'. *Journal of Natural Resources Policy Research*. 2(4). pp. 325-342.
- Alexander, D. (2013) 'An evaluation of medium-term recovery processes after the 6 April 2009 earthquake in L'Aquila, Central Italy'. *Environmental Hazards*. 12(1). pp. 60-73.
- Alexander, D. (2019) 'L'Aquila, central Italy, and the "disaster cycle", 2009-2017'. *Disaster Prevention and Management*. 28(4). pp. 419-433.
- Barabino, P. and F. Sansa (2019) 'L'Aquila, in 10mila nelle new town. Quartieri dormitorio senza servizi e socialità, tra cedimenti e infiltrazioni'. *Il Fatto Quotidiano*, online. Available at: <https://www.ilfattoquotidiano.it/2019/04/03/laquila-in-10mila-nelle-new-town-quartieri-dormitorio-senza-servizi-e-socialita-tra-cedimenti-e-infiltrazioni/5077961/>
- Bates, F.L. (1982) 'Disasters, social change and development'. *Recovery, Change and Development: A Longitudinal Study of the 1976 Guatemalan Earthquake*. 1. pp. 1-36.
- Benson, C. and J. Twigg (2007) *Tools for mainstreaming Disaster Risk Reduction: Guidance Notes for Development Organisations*. Provention Consortium, Geneva. Available at: https://www.preventionweb.net/files/1066_toolsformainstreamingDRR.pdf (accessed on 22 January 2020).
- Bindi, R. (2018) *Relazione Conclusiva, Commissione parlamentare di inchiesta sul fenomeno delle mafie e sulle altre associazioni criminali anche straniere*. Available at: <http://www.avvisopubblico.it/home/wp-content/uploads/2018/02/XXIII-n.-38.pdf> (accessed on 22 January 2020).
- Bolin, R.C. and P. Bolton (1983) 'Recovery in Nicaragua and the USA'. *International Journal of Mass Emergencies and Disasters*. 1(1). pp. 125-144.
- Button, G. and A. Oliver-Smith (2008) 'Disaster, displacement, and employment: Distortion of labor markets during post-Katrina reconstruction'. In N. Gunewardena and M. Schuller (eds), *Capitalizing on catastrophe: Neoliberal strategies in disaster reconstruction*. Altamira Press, Plymouth. pp. 123-145.
- Calandra, L.M. (2016) 'Between perception and reality: towards an assessment of socio-territorial discomfort in L'Aquila (Central Italy) after the earthquake'. *Epidemiologia e prevenzione*. 40(2). pp. 72-81.

- Coppola, D. (2015) *Introduction to International Disaster Management* (3rd edn). Butterworth-Heinemann, London.
- Contreras, M.C., T. Blasche, and M. Hodgson (2017) 'Lack of spatial resilience in a recovery process: A case L'Aquila Italy'. *Technological Forecasting and Social Change*. 121. pp. 76-88
- Cutter, S.L., C.T. Emrich, J.T. Mitchell, B.J. Boruff, M. Gall, M.C. Schmidlein, C.G. Burton, and G. Melton (2006) 'The long road home: Race, class, and recovery from Hurricane Katrina'. *Environment: Science and Policy for Sustainable Development*. 48(2). pp. 8-20.
- Damiani, B. (2008) 'Capitalization of post-9/11 recovery'. In N. Gunewardena and M. Schuller (eds), *Capitalizing on catastrophe: Neoliberal strategies in disaster reconstruction*. Altamira Press, Plymouth, pp. 157-172.
- Denhart, H. (2009) 'Deconstructing disaster: Psycho-social impact of building deconstruction in Post-Katrina, New Orleans'. *Cities*. 26(4). pp. 195-201.
- DfID (2010) *Shelter After Disaster: Strategies for Transitional Settlement and Reconstruction*. London: Department for International Development. Available at: https://www.humanitarianlibrary.org/sites/default/files/2014/01/shelterafterdisasterguidelines2010_0.pdf (accessed on 22 January 2020).
- DNA (Direzione Nazionale Antimafia e Antiterrorismo) (2017) *Relazione annuale sulle attività svolte dal Procuratore Nazionale e dalla Direzione Nazionale antimafia e antiterrorismo nonche' sulle dinamiche e strategie della criminalità organizzata di tipo Mafioso nel periodo 1 Luglio 2015-30 Giugno 2016*, DNA. Available at: <http://www.avvisopubblico.it/home/wp-content/uploads/2017/06/RELAZIONE-DNA-1.7.2015-30.6.2016.pdf> (accessed on 22 January 2020).
- Donini, A. (2008) 'Through a Glass, Darkly'. In N. Gunewardena and M. Schuller (eds), *Capitalizing on catastrophe: Neoliberal strategies in disaster reconstruction*. Altamira Press, Plymouth. pp. 29-44.
- Escaleras, M., N. Anbarci, and C. Register (2007) 'Public sector corruption and major earthquakes: A potentially deadly interaction'. *Public Choice*. 132. pp. 209-230.
- Escaleras, M. and C. Register (2016) 'Public Sector Corruption and Natural Hazards'. *Public Finance Review*. 44(6). pp. 746-768.
- Europol (2013) *Threat Assessment: Italian organised crime*. The Hague: Europol. Available at: https://www.europol.europa.eu/sites/default/files/documents/italian_organised_crime_threat_assessment_0.pdf (accessed on 22 January 2020).
- Faas, A.J. (2016) 'Continuity and change in the applied anthropology of risk, hazards, and disasters'. *Annals of Anthropological Practice*. 40(1). pp. 6-13.
- Faz, C. (2010) 'L'Aquila, la galassia dei lavori dai puntellamenti alla Carducci'. *Il Messaggero*, 17 June 2010.

- Ferraro, F. (2012) *Italian legislation on organised crime, corruption and money laundering*. Library briefing for the European Parliament. Available at: [http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2012/120361/LDM_BRI\(2012\)120361_REV1_EN.pdf](http://www.europarl.europa.eu/RegData/bibliotheque/briefing/2012/120361/LDM_BRI(2012)120361_REV1_EN.pdf) (accessed on 22 January 2020).
- Finocchiaro, A. (2017) *Relazione sullo stato di avanzamento della ricostruzione post-sismica nella Regione Abruzzo*, April. Available at: <http://www.senato.it/service/PDF/PDFServer/DF/331078.pdf> (accessed on 22 January 2020).
- Frisch, G.J. (2010) *L'Aquila. Non si uccide così anche una città?* Clean, Naples
- Gabrielli, F., A. Amato, S. Balducci, L. Magi Galluzzi, and F. Beolchini (2018) 'Disaster waste management in Italy: Analysis of recent case studies'. *Waste Management*. 71. pp. 542-555.
- Gall, M., S.L. Cutter, and K. Nguyen (2014) *Governance in Disaster Risk Management*. Integrated Research on Disaster Risk, Beijing. Available at: <http://www.irdrinternational.org/wp-content/uploads/2015/01/AIRDR-Project-Report-No.-3-WEB-6MB.pdf> (accessed on 22 January 2020).
- Gall, M., S.L. Cutter, and K. Nguyen (2014) *Transformative Development and Disaster Risk Management*. Integrated Research on Disaster Risk, Beijing. Available at: <http://www.irdrinternational.org/wp-content/uploads/2015/03/AIRDR-Project-Report-No.-4.pdf> (accessed 22 January 2020).
- Galullo, R. (2009) *Abruzzo/ Le fessure nel muro che le mafie possono far diventare un nuovo terremoto: bandi di gara, corruzione e Massimo ribasso*, in *Il Sole 24 Ore*, online, 17 April, 2009. Available at: http://robertogalullo.blog.ilsole24ore.com/2009/04/17/abruzzo-le-fessure-nel-muro-che-le-mafie-possono-far-diventare-un-nuovo-terremoto-bandi-di-gara-corruzione-e-massimo-ribas/?refresh_ce=1 (accessed on 22 January 2020).
- Gianforte, M. (2018) *L'Aquila, Fondo immobiliare: udienza rinviata per 'Europa Risorse'*, Rete 8.it, Available at: <http://www.rete8.it/senza-categoria/567laquila-fondo-immobiliare-udienza-rinviata-per-europa-risorse/> (accessed on 22 January 2020).
- GlobalProject (2009) *Metodo Augustus Modello Bertolaso: La costruzione mediatica all'Aquila*, GlobalProject 7 October 2009. Available at: https://www.globalproject.info/it/in_movimento/metodo-augustus-modello-bertolaso/2202 (accessed on 22 January 2020).
- Gunewardena, N. and M. Schuller (Eds). (2008) *Capitalizing on catastrophe: Neoliberal strategies in disaster reconstruction*. Altamira Press, Plymouth.
- Hallegatte, S., A. Vogt-Schilb, M. Bangalore, and J. Rozenberg (2017) *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters*. World Bank, Washington.

- Hallegatte, S., J. Rentschler, and B. Walsh (2018) *Building back better: Achieving resilience through stronger, faster, and more inclusive post-disaster reconstruction*. World Bank, Washington.
- Imperiale, A.J. and F. Vanclay (2016a) 'Experiencing local community resilience in action: Learning from post-disaster communities'. *Journal of Rural Studies*. 47. pp. 204-219.
- Imperiale, A.J. and F. Vanclay (2016b) 'Using social impact assessment to strengthen community resilience in sustainable rural development in mountain areas'. *Mountain Research and Development*. 36(4). pp. 431-442.
- Imperiale, A.J. and F. Vanclay (2019a) 'Reflections on the L'Aquila trial and the social dimensions of Disaster Risk'. *Disaster Prevention and Management: An International Journal*. 28(4). pp. 434-445.
- Imperiale, A.J. and F. Vanclay (2019b) 'Command-and-control, emergency powers, and the failure to observe United Nations disaster management principles following the 2009 L'Aquila earthquake'. *International Journal of Disaster Risk Reduction*. 36. 101099.
- IDNDR (1994) *Yokohama Strategy and Plan of Action for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation*. Available at: <http://www.ifrc.org/Docs/idrl/I248EN.pdf> (accessed on 22 January 2020).
- IFRC and RCS (2004) *World Disaster Report, 2004: Focus on community resilience*. International Federation of Red Cross and Red Crescent Societies, London.
- Jha, A.K., J. Barenstein, P. Duyne, M. Priscilla, D. Pittet, and S. Sena (2010) *Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters*. Washington DC, World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/2409> (accessed on 22 January 2020).
- Johnson, L. and L. Mamula-Seadon (2014) 'Transforming Governance: How National Policies and Organizations for Managing Disaster Recovery Evolved Following the 4 September 2010 and 22 February 2011 Canterbury Earthquakes'. *Earthquake Spectra*. 30(1). pp. 577-605.
- Khakee, A. (2009) *A Comparative Analysis of Emergency Powers in Europe*. Geneva: Geneva Centre for the Democratic Control of Armed Forces. Available at: https://www.files.ethz.ch/isn/99550/pp30_anna_khakee_emergency_powers.pdf (accessed 22 January 2020).
- Klein, N. (2007) *The Shock Doctrine: The Rise of Disaster Capitalism*. Metropolitan Books, NY.
- Lewis, J. (2018) 'Social impacts of corruption upon community resilience and poverty'. *Jamba: Journal of Disaster Risk Studies*. 9(1). pp. a391.

- Libera (2010) *Dossier Abruzzo. Crepe 6 Aprile 2009 ore 3.32. La fine dell'isola felice*, in Site.it, Available at: [www.site.it/le_testate/ notes/DOSSIER%20LIBERA%20web.pdf](http://www.site.it/le_testate/notes/DOSSIER%20LIBERA%20web.pdf) (accessed on 22 January 2020).
- Little, M.E. (2017) 'Innovative Recycling Solutions to Waste Management Challenges in Costa Rican Tourism Communities'. *Journal of Environmental and Tourism Analyses*. 5(1). pp. 33-52.
- Lowenstein, A. (2015) *Disaster Capitalism: Making a killing out of catastrophe*. Verso, Brooklyn.
- Lowenstein, A. (2018) 'Making money from misery'. *Peace Review: A Journal of Social Justice*. 30(2). pp. 127-134.
- Nardecchia, E. Ecosfera, sisma e corruzione: l'indagato Fontana "Pronto a parlare col pm che mi accusa", Il Centro. Available at: <https://www.ilcentro.it/l-aquila/ecosfera-sisma-e-corruzione-spuntano-i-progetti-fotocopia-1.1111312> (accessed on 22 January 2020).
- Oliver-Smith, A., I. Alcántara-Ayala, I. Burton, and A. Lavell (2017) 'The social construction of disaster risk: Seeking root causes'. *International Journal of Disaster Risk Reduction*. 22. pp. 469-474.
- Oliver-Smith, A. (1990) 'Post-disaster housing reconstruction and social inequality: a challenge to policy and practice'. *Disasters*. 14(1). pp. 7-19.
- Oliver-Smith, A. (1977) 'Disaster rehabilitation and social change in Yungay, Peru'. *Human Organization*. 36(1). p. 5-13.
- Orsini, A. (2011) *Quanto costa Fontana, tutte le spese della STM*, in *Abruzzoweb.it*, 24 November, 2011. Available at: <http://www.abruzzoweb.it/contenuti/quanto-costa-fontana-tutte-le-spese-della-stm/40700-334/> (accessed on 22 January 2020).
- Orsini, A. (2014) *La mano dei casalesi nella ricostruzione. La finanza arresta 7 imprenditori*, in *Abruzzoweb.it*, 25 June, 2014. Available at: <http://www.abruzzoweb.it/contenuti/la-mano-dei-casalesi-nella-ricostruzione-la-finanza-arresta-7-imprenditori-/549121-4/> (accessed on 22 January 2020).
- Orsini, A. (2016) *Tangenti puntellamenti: 7 a processo a ottobre, prosciolto Di Gregorio*, in *AbruzzoWeb*, 23 March, Available at: <http://www.abruzzoweb.it/contenuti/tangenti-puntellamenti-7-a-processo--a-ottobre-prosciolto-di-gregorio/594952-4/> (accessed on 22 January 2020).
- Özerdem, A. and G. Rufini (2013) 'L'Aquila's reconstruction challenges: has Italy learned from its previous earthquake disasters?'. *Disasters*. 37(1). pp. 119-143.
- Owen, G. (2011) 'After the flood: Disaster capitalism and the symbolic restructuring of intellectual space'. *Culture and Organization*. 17(2). pp. 123-137.
- Perry, R.W. and E.L. Quarantelli (2005) *What is a disaster?: New answers to old questions*. Philadelphia: Xlibris Corporation.

- Postiglione, A. (2010) *Affari e terremoti: svelate le trame che hanno ricostruito l'Abruzzo*, Verso L'Aquila, 13 March, 2010. Available at: <https://versolaquila.wordpress.com/2010/03/13/svelate-le-trame-che-hanno-ricostruito-l%E2%80%99abruzzo/> (accessed on 22 January 2020).
- Pyles, L., J. Svistova, and S. Ahn (2017) 'Securitization, racial cleansing, and disaster capitalism: Neoliberal disaster governance in the US Gulf Coast and Haiti.' *Critical Social Policy*. 37(4). pp. 582-603.
- Quarantelli, E.L. (Ed.). (1998) *What is a Disaster? Perspectives on the Question*. New York: Routledge.
- Redazione (2015) *Ricostruzione: Finanza sequestra beni a due ditte aquilane per 2,5 milioni. Nel mirino il Consorzio Federico II*, NewsTown, 14 January 2015. Available at: <http://news-town.it/cronaca/6232-ricostruzione-finanza-sequestra-beni-a-ditte-aquilane-per-2-5-mlioni-nel-mirino-il-consorzio-federico-ii-e-i-lavori-alla-caserma-campomizzi-12-indagati.html> (accessed on 22 January 2020).
- Redazione PdN (2012) *Dimissioni Fontana. Il centrosinistra: "vada a casa, non lo rimpiangerà nessuno"*, in Prima da Noi.it, 26 January, 2012. Available at: <https://www.primadanoi.it/news/regione/524295/Dimissioni-Fontana--Il-centrosinistra---vada-a-casa--non-lo-rimpiangerà-nessuno-.html> (accessed on 22 January 2020).
- Saviano, R. (2009) *La ricostruzione a rischio clan ecco il partito del terremoto*, in La Repubblica.it, 14 April, 2009. Available at: <http://www.repubblica.it/2009/04/sezioni/cronaca/sisma-aquila-5/saviano/saviano.html> (accessed on 22 January 2020)
- Schuller, M., and J.K. Maldonado (2016) 'Disaster capitalism'. *Annals of Anthropological Practice*. 40(1). pp. 61-72.
- Søndergaard, S. (2013) *Feedback Report on the Fact-Finding Mission to Italy*, 2013. Available at: http://www.europarl.europa.eu/meetdocs/2009_2014/documents/cont/dt/1007/1007699/1007699en.pdf (accessed 22 January 2020).
- Tierney, K. (2003) 'Disaster beliefs and institutional interests: Recycling disaster myths in the aftermath of 9-11'. In L. Clarke (ed), *Terrorism and Disaster: New Threats, New Ideas*. Amsterdam: Elsevier, pp. 35-51.
- Tierney, K., C. Bevc, and E. Kuligowski (2006) 'Metaphors matter: Disaster myths, media frames and their consequences in Hurricane Katrina'. *Annals of the American Academy of Political and Social Science*. 604(1). pp. 57-81.
- Tierney, K. and A. Oliver-Smith (2012) 'Social dimensions of disaster recovery'. *International Journal of Mass Emergencies & Disasters*. 30(2). pp. 123-146.

- UN General Assembly (2015) *Transforming our world: the 2030 Agenda for Sustainable Development*, 21 October 2015, A/RES/70/1. Available at: <https://www.refworld.org/docid/57b6e3e44.html> (accessed on 22 January 2020).
- UNDP (2014) *Human Development Report 2014. Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. United Nations Development Programme, New York.
- UNISDR and UNDP (2007) *Building Disaster Resilient Communities: Good Practices and Lessons Learned*, Global Network of NGOs for Disaster Risk Reduction, Geneva, June, 2007. Available at: https://www.unisdr.org/files/596_10307.pdf (accessed on 22 January 2020).
- UNISDR (2005) *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*. Available at: <http://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf> (accessed on 22 January 2020).
- UNISDR (2007) *Building Disaster Resilient Communities: Good Practices and Lessons Learned*. Geneva: United Nations Development Program. http://www.unisdr.org/files/596_10307.pdf (accessed 22 January 2020).
- UNISDR (2015) *Sendai Framework for Disaster Risk Reduction 2015-2030*. Available at: http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf (accessed on 22 January 2020).
- UNDRO (1982) *Shelter After Disaster: Guidelines for Assistance*. Office of the United Nations Disaster Relief Co-Ordinator. Geneva. Available at: <https://reliefweb.int/report/world/shelter-after-disaster-guidelines-assistance> (accessed on 22 January 2020).
- USEPA (1995) *Planning for Disaster Debris*. United States Environmental Protection Agency, Office of Solid Waste and Emergency Response. Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/10000MU0.PDF?Dockey=10000MU0.PDF> (accessed on 22 January 2020).
- USEPA (2008) *Planning for Natural Disaster Debris*. United States Environmental Protection Agency, Office of Solid Waste. Available at: <https://www.epa.gov/sites/production/files/2015-08/documents/pndd.pdf> (accessed on 22 January 2020).
- Valent, G. (2019) 'Disaster recovery and violence in neoliberal times: community and spatial fragmentation in L'Aquila'. *Disaster Prevention and Management: An International Journal*. 28(4). pp. 446-459.
- Vanclay, F., J. Baines, and C.N. Taylor (2013) 'Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I'. *Impact Assessment & Project Appraisal*. 31(4). pp. 243-253.

Venice Commission (1995) *Emergency Powers*, Science and technique of democracy No. 12, Strasburg: European Commission for Democracy to Law, CDL-STD(1995)012. Available at: [http://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-STD\(1995\)012-e](http://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-STD(1995)012-e) (accessed on 22 January 2020).

World Bank (2009) *Building Resilient Communities: Risk Management and Response to Natural Disasters through Social Funds and Community-Driven Development Operations*. World Bank, Washington.

Yamada, S., M. Cabaljao, and A. Imasa (2018) 'Disaster Capitalism in Post-Yolanda/Haiyan Eastern Visayas'. *Environmental Justice*. 11(2). pp. 84-88.

Yee, D.K.P. (2018) 'Violence and Disaster Capitalism in post-Haiyan Philippines'. *Peace Review*. 30(2). pp. 160-167.