

## Opening Editorial

In the aftermath of the L'Aquila earthquake the world almost stopped spinning in disbelief. What prompted surprise were not the catastrophic consequences of the earthquake, but the initiation by Italian prosecutors of a trial against six scientists and one public official for their reassurances about safety on the eve of the tragic event. The global disbelief only grew last year as the competent tribunal sentenced each of the seven to six years' imprisonment for manslaughter.<sup>1</sup>

While the dominant narrative depicted these events as an instance of 'science on trial', we dismiss this interpretation as inaccurate and provide – by relying on the detailed legal and policy analysis offered by the individual contributors to this special issue – an alternative, contextual, and more informed reading. We suggest that the case against the 'L'Aquila Seven' should be read within a broader paradigmatic shift in our understanding of the role of public officials and scientists in disaster management. Despite traditional significant cross-country variability in the attitude of government officials towards public demand for information<sup>2</sup>, there appears an emerging trend towards holding public officials, including scientists, responsible for the consequences of natural disasters. As Kristian Lauta writes in his individual contribution, despite their inherent violence, disasters can today no longer serve as 'free get-out-of-jail-cards from the responsibility of professional neglect'.

### Background

A terrible earthquake in 2009 caused the death of 309 people, seriously injured more than 1100, and utterly destroyed the medieval town L'Aquila in the Abruzzo region in central Italy. The devastating disaster had not only immediate consequences for the affected population, but also quickly became an important political arena for the then-prime minister Silvio Berlusconi<sup>3</sup>, giving cause for the comedian Sabina Guzzanti's satirical movie 'Draquila - L'Italia che trema' ['Draquila – Italy shakes']<sup>4</sup> on the political establishment's (ab)use of the disaster.<sup>5</sup>

Five years after the tragic event, very tangible evidence of this tragedy can still be found in L'Aquila, however it is the trial that continues to generate controversy.

1 Furthermore, the L'Aquila Seven were permanently banned from holding public office, and required to pay €450,000 each in compensation to the victims. David E. Alexander, "Communicating Earthquake Risk to the Public: The Trial of the 'L'Aquila Seven'", 72(2) *Natural Hazards* (2014), p. 6.

2 While in some countries public officials tend to prepare the worst in order to reduce their responsibility should that situation materialises, in others public authorities downplay the risks in order to reassure the public. See, e.g., J. Etienne and T. Palermo, The L'Aquila Earthquake case is not 'science on trial'. It is a challenge to the way officials communicate to the public, EUROPP, London School of Economics, 1 November 2012,

3 See e.g. "Death toll rises after Italy quake", BBC News, 7 April 2009, available at <http://news.bbc.co.uk/2/hi/europe/7987698.stm> (last visited May 2014).

4 See the International Movie Database: <http://www.imdb.com/title/tt1650404/> (last visited May 2014).

5 David E. Alexander, "Communicating Earthquake Risk to the Public: The Trial of the 'L'Aquila Seven'", 72(2) *Natural Hazards* (2014), p. 3.

## 'Science on trial'?

Not least due to the setting of the trial, in Italy, the media were quick to draw parallels to the Roman Inquisition's trial over the scientist Galileo – framing the trial as 'a trial against Science'<sup>6</sup>. This misrepresentation of the events fuelled by the international media caused global hysteria.<sup>7</sup> More than 5.000 scientists signed a petition to pardon the L'Aquila Seven, stating among other things: 'To expect more of science at this time is unreasonable'<sup>8</sup>.

While a trial against scientists (and science) for their alleged inability to foresee an earthquake would have justified such a reaction, this is hardly the case of the L'Aquila Seven.

The L'Aquila Seven was not accused for what they could not know (that an earthquake was coming). They stood responsible for what they knew, but did not tell (that a small residual risk of a major earthquake persisted), and what they should have known, as the leading seismologists in Italy (that, in light of state-of-art seismological knowledge, the risk was bigger than the commission assessed). Rather than a trial against science the L'Aquila decision is a decision on professional neglect and failed risk communication. In the tribunal's view, the duty of the commission of experts was not only to assess the probabilistic risk of an earthquake, but also to estimate the damage that such an earthquake could cause ('social risk'), and communicate that risk as part of the state's strategy of earthquake preparedness.

Even though this alternative reading of the events inevitably reduces the front page-value of judgment – it remains interesting for law in general, and risk regulation in particular. Thus, is it, from a legal perspective, an extraordinary decision? To what extent do the events reflect country-level specificity? Why do we have this sudden need to blame after natural disasters? How should scientific knowledge be collected, processed and integrated in public decision-making? How do we establish legal causality in complex, multi-causal events like an earthquake? And, finally, what kind of role should individuals' laymen judgment play in disaster management?

This special issue of European Journal for Risk Regulation addresses many of these questions. Thus, it aims to place the (in)famous L'Aquila judgment in a less sensationalist and more informed discourse about responsibility in disaster law. In order to do so, we have solicited contributions from several scholars who have been following closely the unfolding of the L'Aquila's events. When read together, they provide dif-

6 Stuart Clark: "From Galileo to the L'Aquila earthquake: Italian science on trial", Guardian, 24 October 2012, available at <http://www.theguardian.com/science/across-the-universe/2012/oct/24/galileo-laquila-earthquake-italian-science-trial> (last visited March 2014); Stephen Hall, "Scientists at trial: At Fault?", 477 *Nature* (2011), pp. 264–269; Jordi Prats, "The L'Aquila earthquake: Science or risk on trial?", 9(6) *Significance* (2012).

7 Ibid. See also Editorial: "The Italian quake inquisition", Los Angeles Times, September 26 2011, available at <http://articles.latimes.com/2011/sep/26/opinion/la-ed-quake-20110926> (last visited May 2014).

8 As quoted in David Ropenik: "Italian Seismologists on Trial—for Failing to Communicate Well?", Scientific American Blog, 20 October 2011, available at <http://blogs.scientificamerican.com/guest-blog/2011/10/20/italian-seismologists-on-trial-for-failing-to-communicate-well/> (last visited May 2014).

ferent, yet complementary, perspectives that help in making some sense of what happened in L'Aquila and what this judgment means, not only for the future of disaster research, but also for our collective understanding of a disaster.

## Structure of the Special Issue

In his case comment, *Alfredo Fioritto*, sets the scene by drawing up the facts and content of the judgment in light of Italian law. Professor Fioritto points out – by relying on his scholarship on disaster risk management – a number of challenges for the future design of legal framework for major risks in Italy, Europe and beyond.

On the global level, we have seen several cases regarding professional neglect after disasters in recent years. New Orleans' Dr. Pou's infamous decision to leave (and drug) a group of patients under the evacuation of Memorial Medical Center during the response to Hurricane Katrina, was subject to heavy controversy and following adoption of immunity laws in Louisiana.<sup>9</sup> Latest three Chilean public officials were charged with manslaughter for not sounding the tsunami alarm following the earthquake in 2010.<sup>10</sup>

*Kristian Cedervall Lautu* takes on the general question of responsibility for disasters, and argues that as our understanding of what is a disaster changes over time, so do the way we approach the question of legal responsibility.

In particular the issue of how scientific findings are assessed in and integrated into public decision-making and policy development is a controversial, longstanding and not easily solved issue. *Marta Simoncini* takes on this question when discussing the relationship between science and policy in risk regulation. Marta criticizes in particular the unclear distribution of responsibility in the communication and assessment of risks, and calls out for a much clearer legal distribution of such roles.

Finally, in the article 'Scientists and earthquake risk prediction: "ordinary" liability in an extraordinary case?' *Domenico Notaro* provides an analysis of the trial by taking a privileged perspective of Italian criminal law. In particular, he focused on the fascinating yet thorny question on how to assess the causality between the press conference, in which the Seven allegedly misinformed the public, and the victims' tragic decision not to evacuate.

## Conclusions

The L'Aquila events offer a promising case study for all those interested in the politics as well as legality of disaster management and communication. The catastrophe con-

9 See Sheri Fink: "The Deadly Choices at Memorial", New York Times, 25 August 2009. Available at: [http://www.nytimes.com/2009/08/30/magazine/30doctors.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2009/08/30/magazine/30doctors.html?pagewanted=all&_r=0) (last visited March 2014).

10 See Pascale Bonnefoy, "Chilean Judge Upholds Manslaughter Charges Linked to 2010 Tsunami", New York Times, May 16, 2016. Available at <http://www.nytimes.com/2013/05/17/world/americas/chilean-judge-upholds-manslaughter-charges-against-officials-over-tsunami-alert.html> (last visited May 2014).

firmly the role and value of responsible scientific communication. Due to the gradual proceduralisation of catastrophic events, disasters are no longer exceptional phenomena whose inherent emergency nature exempt public authorities from any form of liability. Rather they prompt – similar to other ordinary events – a clear set of liabilities. This development must be welcomed. At the same time, however, the progressive proceduralisation and legalization of catastrophic phenomena is causing a significant, yet often overlooked, impact on our own understanding of major events. By designing and implementing our disaster management system entirely on the basis of expert advice, it limits the scope for our 'lay judgment' of similar phenomena, in turn reducing our own individual role in disaster preparedness and management. In other words, while the predictability offered by this judgment is praiseworthy as it eventually reduces blame games, it is equally problematic as it might lead society to disregard the accumulated lay expertise on how to respond to earthquakes. In L'Aquila the local population was entirely dependent on scientific advice. In other words, the criminalization of experts inevitably corresponds to a de-responsibilisation of each individual in society when facing imminent catastrophes. This is a point into which further research is needed. In order to design an effective and appropriate liability scheme all incentives must be aligned in a society: on the one hand, one should sanction the injustice in disaster management and on the other, one should encourage individuals to rely on their lay judgment.

While the 'jury is still out' – working on the appeal case from L'Aquila – we hope to have succeeded in providing a more informed reading of the judgement, than the (wrong) mainstream narrative presently surrounding this case. Enjoy.

*Alberto Alemanno and Kristian Cedervall Lautau*