



7

Conclusion

7.1 Lived Relations to Risk

A cursory glance at Google scholar searches for ‘risk’ would reveal its application and efficacy across the world, in domains stretching from finance and insurance to health and welfare. Risk, as the book has shown, is similarly prominent in the steps governments take to secure against emergency events that threaten to disrupt normalised socio-political order. As a mode of rationality that shapes, informs and justifies the courses of action taken by governments and businesses alike, risk has a major influence in affecting present conditions of global existence. With the strength of its universality acknowledged, it is important to retain some understanding of risk in the abstract register as an epistemological device that captures, addresses and projects upon a potential state of affairs. It is because of its existence on this register that risk has attained its vast applicability. But as the book has shown, perhaps this characterisation of risk in the abstract should only be treated as a starting point. In this incarnation, we might be able to say what risk is, but what does risk do? How does it influence and shape everyday life in the local spaces and places within which it becomes integrated as organisational motif? Through what means is this ingratiation mobilised in the first place? And

how should the political complications that risk's rise to prominence brings about be discussed?

The book has conceptualised risk in the abstract only insofar as it provides contours for the articulation of risk's capacity. As well as referring *to* potential events, risk exists *as* a potential mode of being and doing which is taken up in different ways in different cases. It is by examining the multiple ways in which its capacity is actualised that the book has studied risk as a lived relation. Risk's life can be gauged through different modes of relation that it instantiates or gets enveloped within. Risk is brought to life, then, through the data sourcing techniques used as fire emergencies that are unfolding as demonstrated in Chap. 3. It is upon such techniques that risk's vitality and efficacy as a political rationality in the FRS rely. As shown in Chap. 4, conversely, risk has started to weigh-in on firefighters' perspectives as they travel through the areas that they live in and govern. Not simply a means for making things that have yet to come solid in organisational imaginaries across the world, the book has shown how risk is brought to life and enlivened through the everyday practices in the everyday places in which it is considered *modus operandi*. At the same time, risk bears influence on how the life that it connects with is performed and mediated. Extending Massumi's (2011) notion of a lived relation, risk not only appears as a capacity to be fulfilled but can also be seen engaging in different forms of encounter with which it relates to.

This begs the question, however, of what entities does risk actually relate to? The book has sought to answer this question in various ways through elaborating on the forces of enrolment that risk's prevalence across the FRS is premised upon. That is, how risk exerts itself and becomes manifested in the daily life of the FRS through the things it gets attached to. In some ways, risk is something that is materialised through the complex operations that take place within the FRS' digital infrastructure. On screens, risk appears represented as a series of incidents distributed through space in maps. Similarly, the past occurrence of fire emergencies is charted through time to show their relative probability in the future. With its visualisation, risk is inserted into and extends the play and performance of relations between digital technologies on the one hand and the human bodies that operate them on the other. Extending to these bodies and the range of senses they can enact, risk can be inquired

into also as an affective condition in the everyday life of those governing. In Chap. 6, for instance, the book delved into the world of the FDNY control room to find that the litany of technological components present was accompanied by, and actively invoked, a perpetual sense of alertness distributed amongst those handling emergency calls. This affective condition ensured the grounds for preparedness by enabling rapid response to the emergency whilst also resting on and reiterating the ontological premise that emergencies are ever likely and, indeed, inevitable. In the same chapter, however, different material forces enrolled in the facilitation of risk governance appear. Reflecting on how to protect the built environment from future fires, what Pete Adey has referred to as the ‘force of the elemental’ (57, 2015) was shown in some ways to be mobilised as a factor for the FRS to consider. These elemental considerations are themselves inserted into the design of the spaces that are taken for granted. That elemental forces are enfolded into the contemporary security apparatus in this way should not come as much of a surprise. At the very least since the Great Fire of London in 1666, an elemental reasoning underscored the governmental imaginary of fire emergencies. What animates this imaginary is fire’s capacity to spread and circulate, how it might engulf in its flames that which stands in its path and, in turn, produce a plethora of consequent new hazards and dangers.

In examining enrolment, the book has not only tried to outline and catalogue the forces through which risk is brought to life. Instead, it has sought to conceptualise enrolment as a process in itself. Present throughout the book, this is a feature particularly prominent in Chap. 5’s exploration of the redeployment of MOSAIC lifestyle software and is conceptually elaborated upon in Chap. 6 through the notion of detournement. Beyond the forging of relations, risk’s rise to prominence in the FRS was shown here to be organised around acts by which material things are appropriated and redeployed for new purposes. This process is most perceptibly traceable with regards to the new technologies that the FRS have become increasingly reliant upon. Various personnel have developed numerous crafts in seeking to optimise the use of commercially available software for the purpose of identifying and governing fire risk. Beyond Chaps. 5 and 6, one of these crafts can be seen to be developing where the Training Coordinator in Chap. 4 considers how, exactly, one might apply

a graphic motion suite initially made for cinema to make experiential fire emergencies that, because of past events, would represent a break and rupture with how such emergencies appear already in the organisational memory of the FRS. Reiterated in this case is a claim made in Chap. 6 that detournement should not be studied just in terms of the development of crafts that make it possible or by identifying the lines of translation through which software itself gets re-applied in a new field. Critical inquiry needs to extend instead to that which software produces and how it takes on new significance when re-applied for new purposes. Coming back to Chap. 4, then, along with the software itself, questions need to extend to how emergencies of catastrophic, 'Hollywood', proportions become normal renderings through which to develop new fire response protocols. Or, in Chap. 6 itself, how the maelstrom of moving images invokes a sense of stimulation within and across operators for the purpose of being ever-ready. As a process, lived relations to risk have substantial political consequences, stretching the forms that uncertain futures requiring governance take and affecting new bodily states in those governing.

7.2 The Politics of Data and Technology

Thinking with the processes that underpin the software through which risk in part is facilitated, the book also adds to a crucially important observation made many times that digitised data are now the very stuff of governance. Nevertheless, the book's examination of everyday processes allows for a reappraisal of data. In Chap. 3, it was argued that data should not be treated as an uncomplicated category referring in the first instance to unitised segments of empirical reality rendered operable across the digital infrastructure of the FRS. Instead, data should be conceptualised initially by a more simple form of the word's meaning. Data should be thought of first and foremost simply as that which are given (Dodge and Kitchin 2005). In this way, data do not presume a digital character to that which is constituted as such, but refer instead to all the world's happenings that can be cognised by human bodies and the algorithms organising the operation of software alike. This base definition is crucial because it opens up a gap between data emerging in the throes of the world's

existence and the role that it comes to play as a set of things mobilised for the purposes of governance. Scrutinising how this gap is bridged in the FRS, the book has emphasised that the data now used to govern the world are the product of deep investment in, and cultivation through, situated organisational processes. Acts of datafication are far from matters of simple pragmatism. Instead, they are intervened upon and cut across in a number of ways. Such was exemplified in Chap. 3 where Quality Assurance Officers were shown to make the cut regarding what data are pertinent for knowing and governing risk and, thus by default, what are not. This decision itself was made in pursuit of specific governmental ends that, whilst localised in many ways, retain a connection to the broader historical circumstances in which the play of security now takes place. To be specific it assured that particular renditions of past events, recorded through certain data sourcing practices, feed into the risk calculus that the FRS will go on to deploy.

As suggested in many leading works, data do not afford objective accounts reflective of reality (Amoore 2013; de Goede 2012; Halpern 2015). Instead, they are born of politics and the way a broader political situation is interwoven into local circumstance. Whilst the example of datafication speaks to the political entanglements behind the *emergence* of data, the book has also sought to extend understanding of how the politics of data is evident in terms of the *consequences* data have on that which it makes computable in new ways. The MOSAIC software explored in Chap. 5, for instance, was explored as a symbol of the FRS' use of so-called Big Data repositories and the analytic possibilities that go with them. The software, and the data mobilised through it, was said to re-constitute populations in the eyes of those governing. Population has for a long time proven a category crucial to the enactment of security, but through Big Data population comes to show how human life appears as a thing governable under evermore refined layers of resolution and granularity. At the same time, Big Data resources pave the way for populations to be recognised across an ever-wider array of guises, from the consumer habits, family backgrounds, typical occupations and house sizes amongst a plethora of other variables. Known in increasingly intricate depth and broader breadth, 'the population' are of course opened up to new forms of governance too in which potential proclivity becomes the basis for

modes of intervention in the here and now, a matter the conclusion returns to shortly.

The mass mobilisation of data that is now possible also renegotiates the parameters within which the future is conceived as a space time that can be acted upon and within. In comparison to their earlier incarnation as found in Chap. 2, the data that the FRS now have at its disposal allow different assumptions to underpin the FRS' understanding of what the future can be. Not bound to a belief that what can be known is that which data suggest is probable, the FRS are driven to make sense of futures that are extendedly alternative to what the past might suggest is coming. Here, risk's mobilisation allows the FRS to expand their horizons in terms of the futures that they seek to govern. Echoing a manoeuvre witnessed across the security apparatus (Daase and Kessler 2007; De Goede 2008), fire governance is premised on attending to futures considered more uncertain than ever before.

In bringing to the discussion the FRS' engagement with uncertain futures based on the speculations that a wider data pool makes possible, it is important to reiterate that lived relations to risk are not only mediated by ways of knowing facilitated through digital technologies. The book has documented a range of other forms of knowledge that are involved in fire's articulation as a risk. At many points, the memory and experience of firefighters appear crucial for risk projections. To return to Chap. 3, decisions about whether data are useful for risk analysis are based on what the past has told the Quality Assurance Officer about different data sourcing practices. MOSAIC risk profiling is questioned in Chap. 5, alternately, by analyst speculations regarding 'little old ladies' living vulnerably in areas that are considered safe. Future contingencies are the object of aesthetics too, with scenes of the future emergency being acted out, simulated and consequently felt across numerous sensory outputs such as seeing, hearing and touching in Chap. 4. The future imaginary of emergency that pervades the FRS is thus the result of heterogeneous forms of knowledge co-existing with one another. In some cases, they might work to co-produce risk projections. This is evident where largely paper-based fire investigation information offers narrative support to MOSAIC risk profiling in Chap. 5. Yet their co-existence can also be a source of tension, one that can be seen to come to a head where risk projections are contested. Remaining in Chap. 5, the fire investigator

responsible for in-depth accounts of the individual circumstances surrounding a fire death thus criticised the ‘pigeon-holing’ that they thought was a consequence of the FRS’ increasingly use of Big Data resources.

7.3 Times of the Future

Premised on the multiple material entanglements that make up daily life in the FRS, the temporal referents of risk are complex. Of course, risk refers to the future. But in its projection, risk embodies traces of other temporalities altogether. The projections made concerning the future bear within them traces of the past. Since the widespread deployment of risk under the calculative auspices of probability, these connections between past and future have been evident. So much is indicated by the tables and charts constructed in back alleys of seventeenth-century City of London when insurance companies first sought to articulate fire as a risk that could prove profitable. It is also found deeply nestled in the risk profiling carried out now, with vulnerability assessments being fed information from past instances in which fire has resulted in fatalities.

Futures imagined can also be seen to rely on performances that work to proliferate and extend a present stated task that could otherwise be finalised. Think, for instance, of how the FSEC risk mapping discussed in Chap. 3 is enacted not simply through algorithmically determined processing designed to meet the goal of enhancing the distribution of resources in a way spatially attuned to the future’s predicted unfolding. Its effectiveness is instead realised through human-computer interface that allows for the analysis undertaken to be repeated over and again. Injects in exercises, furthermore, operate specifically by scuppering attempts by participants to bring imagined emergencies to a point of safe resolution. Where risk is defined simply as a category occupied by consolidated renditions of the future, such practices might seem incomplete and redundant. But, where risk is considered more as part of everyday life in the FRS, it is possible to see that the importance of these practices resides precisely in the capacity to defer the production of finalised risk information. The practices allow for a conceptualisation of risk and the future as something that is made and that thus goes through periods of being in the making.

Complex temporal configurations also organise and underpin the modes of intervention that risk, by the projections made under its name, helps to bring to bear on the world. Crucial to the forms of governance that the FRS now enact, these modes of intervention have appeared at different points in the book. Through risk, attempts can be made to ensure that populations, particularly those deemed vulnerable, are prevented from becoming the victim of fire emergencies. The built environment is cast as an object that requires protection. Numerous steps are taken, furthermore, to prepare the service to respond for the next fire emergency. Facilitated through risk, these modes of intervention are premised on the coordination of temporal domains that underpin calculations made on the future as described above. Extracted from the analytic processes through which they emerge as plausible courses of action, however, another set of temporal referents arise in relation to these modes of intervention. So whilst prevention is rendered actionable in part by the inferences MOSAIC makes by connecting past events with future vulnerabilities, its specificity as a technique of security rests on its orientation to stop from happening a threat that has been identified in a targeted and precise manner. Similarly, preparedness might be enacted through the (re)iterating rhythms of interface which characterise risk mapping, but it is mobilised by control room operators stimulated by the sheer continuing possibility that the next fire might happen at any time, in any place. Extending what Ben Anderson (2010) and Brian Massumi (2015) have already shown to be the case, modes of intervention are premised not just on configurations between past-present-future. Instead, they rest on, and in their enactment work to produce, refined imaginaries of future contingencies that are nuanced and discrete from one another.

7.4 Risk's Absence as a Critique of the Present

Despite the need for an appreciation of their nuanced difference, these modes of intervention reiterate that risk is mobilised across the security apparatus as a regulatory measure. The regulatory capabilities of risk are of course directed at the litany of object-subjects through which fire's future is made calculable. Amongst many examples of risk's regulatory

The shaping of the layout of business premises in compliance with legal responsibilities to protect against fire would be one example amongst many of how risk operates in a regulatory fashion. But regulation might be said to operate in more reflexive ways too. With its gaze reverted, risk is used to keep in check and re-order the FRS itself. This is evident in how risk is used by the FRS to keep the allocation of its resources attuned to the spatial distribution of fire risk, for instance, or how preventative actions are targeted to those most in need of them.

In the time that has elapsed since the research underpinning this book took place, many of the broad contextual themes underscoring its concern have continued or reappeared. Following Lauren Berlant's line of thought (2007) the FRS remain a case that bears lines of extension to and from many events that affect the world in general. The case of the FRS represents the localised effects of events that have a much broader reach. Under Donald Trump, the USA has reverted to increasing the number of troops on the ground in Afghanistan, conjuring up memories of the daily assaults taking place at the same area as the *Fire and Rescue Services Act* was written and established in 2004. Not unconnected, new waves, and types, of terrorist attacks have become common place in Western Europe. Demonstrating not just a continuation but an intensification of the emergencies confronted in the UK, the current Conservative government's imposition of austerity measures might be adjudged to have reached the zenith of its danger with the tragedy of the Grenfell Tower fire.

All the same, some distinct intimations towards interruptions with the past seem to be animating the present. Particularly interesting from the perspective of this book would be the seeming disappearance, at least in some ways, of risk as a regulatory measure. The claim here, of course, is not that risk does not appear as the dominant form of knowledge through which security agencies plan for and intervene on potential emergencies. Nor how government organisations and businesses alike plan their future. Instead, it seems that in some ways risk appears less pronounced in the major political developments that will, at some point in the not so distant future, change the circumstances that security agencies act within and which shape the contingencies that such agencies will attend to.

June 23, 2016, the date of the referendum result confirming that Britain's public by a slight majority had decided to leave the EU. The

result came, largely, as a shock and surprise to many of the pollsters whose careers and professions rely on making accurate predictions regarding such events. Perhaps more interesting, however, was the fact that, at their press conference that day, Michael Gove and Boris Johnson, who co-lead the campaign to leave the EU, appeared equally bewildered and stunned. Since the result, anxiety over the lack of clarity over Britain's future has been ubiquitous. Later on in the same year, both pollsters and many people across the world were equally aghast when reality TV star Donald Trump won the majority of electoral college votes in the US General Election. Like many of his business ventures, the Trump administration has proven a failure in many ways, with legislation not being passed through Congress, constant cabinet reshuffling and government departments dangerously under-staffed.

Despite being aided by the use of a sophisticated profiling technology developed by the company Cambridge Analytica to find those most vulnerable to being persuaded to vote for them, both of these cases and their aftermath seem to suggest that risk and risk planning play less of a role than one might expect to be the case.¹ In respect to both campaigns, there appears to have been a distinct lack of emphasis on making projections onto the future and, in turn, planning courses of action if such projections extend into the present. In its place, the contingency and disruption that risk seeks in ways to address and control is wielded as a mechanism to attain power in itself.

Despite the potential, and partial, loss of its efficacy, risk nevertheless remains a significant conceptual tool in addressing such cases. It does so because it opens up the possibility for critique of what begins to unfold in its wake. By exploring the absence of risk, critical exploration is made possible concerning how instigating contingency operates as a mechanism of power. Lines of inquiry here might probe, for example, the way in which the many dangers of leaving the EU have been appropriated as 'golden opportunities' by Boris Johnson.² Alternately, close scrutiny might

¹<https://www.theguardian.com/politics/2017/mar/04/nigel-oakes-cambridge-analytica-what-role-brexit-trump> (last accessed 12/09/2017).

²<https://www.theguardian.com/politics/ng-interactive/2016/jun/27/what-boris-johnson-said-about-brexit-and-what-he-really-meant> (last accessed 12/09/2017).

be afforded to how the nomenclature of Fake News is used by Donald Trump in an attempt to instantiate doubt of most journalists and media companies. At the same time, risk's absence can be read as a factor for explaining the fall-out that has begun to unravel in both the cases explored here. Failure to plan for anything beyond the campaign has led to both the Trump administration and arrangements for Brexit to appear largely farcical and dangerous. But the Trump presidency and Brexit can be critically engaged with furthermore by applying to them lines of inquiry that, through the duration of the book, have been commonly associated to the operation of risk in the context of emergency governance and security. Specifically, we might ask, what consequences might this present state have for the future? Early indications suggest that, lacking risk's premise, forms of insecurity are likely to develop anew both globally and locally.

References

- Adey, P. (2015). Air's Affinities: Geopolitics, Chemical Affect and the Force of the Elemental. *Dialogues in Human Geography*, 1(5), 54–75.
- Amoore, L. (2013). *The Politics of Possibility: Risk and Security Beyond Probability*. Durham: Duke University Press.
- Anderson, B. (2010). Preemption, Precaution, Preparedness: Anticipatory Action and Future Geographies. *Progress in Human Geography*, 34, 777–798.
- Berlant, L. (2007). On the Case. *Critical Inquiry*, 33(4), 663–672.
- Daase, C., & Kessler, O. (2007). Known and Unknowns in the 'War on Terror': Uncertainty and the Political Construction of Danger. *Security Dialogue*, 38(4), 411–434.
- de Goede, M. (2008). Beyond Risk: Pre-mediation and the Post 9/11 Imagination. *Security Dialogue*, 39(2–3), 155–176.
- de Goede, M. (2012). *Speculative Security: The Politics of Pursuing Terrorist Monies*. London: University of Minnesota Press.
- Dodge, M., & Kitchin, R. (2005). Codes of Life: Identification Codes and the Machine Readable World. *Environment and Planning D: Society and Space*, 23, 851–881.
- Halpern, O. (2015). *Beautiful Data: A History of Vision and Reason Since 1945*. Durham: Duke University Press.
- Massumi, B. (2011). *Semblance and Event: Activist Philosophy and the Occurrent Arts*. Cambridge: MIT Press.

Massumi, B. (2015). *Ontopower: War, Power and the State of Perception*. Cambridge: MIT Press.

Retrieved from <http://www.independent.co.uk/news/uk/politics/brexit-eu-referendum-campaigners-there-is-no-plan-next-pm-tory-leadership-contest-a7104711.html>

Retrieved September 12, 2017, from <https://www.theguardian.com/politics/2017/mar/04/nigel-oakes-cambridge-analytica-what-role-brexit-trump>

Retrieved September 12, 2017, from <https://www.theguardian.com/politics/ng-interactive/2016/jun/27/what-boris-johnson-said-about-brexit-and-what-he-really-meant>

Retrieved December 18, 2017, from <https://www.theguardian.com/us-news/2017/aug/21/donald-trump-expand-us-military-intervention-afghanistan-pakistan>