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Guest editorial: Disaster, state and Science: Historical narratives of extreme weather in East Asia and the Pacific

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This curated special issue asks how history can be used as a lens into disaster and disaster management. It takes as its premise the idea that approaches from different disciplines - including the humanities and social sciences – can offer new perspectives on understanding disaster, managing disaster and disaster risk. The concept is not new, historically focussed studies have long provided meat for hazard investigations and modelling, especially those focused on geological or hydrological time-series analyses; multi-hazard interactions and identifying historical underliers for contemporary risk. It has become increasingly common, for example, to include historians in collaborative efforts to better understand disasters (e.g. Wasson, 2020; Martin, 2019), to provide a critical engagement with sources and methods for understanding the contemporary socio-cultural and governance frameworks underpinning the scale and dynamics of particular historical events, or to explore historical triggers that have acted to strengthen or weaken systems of risk or resilience. Likewise, historical archival sources have been used to extend hydrological or climatic records further into the past (Brázdil et al., 2018; Kjeldson, 2014; Glaser et al., 2004). Within the field of history, disaster history – frequently linked to environmental history – has emerged in recent years to shed new perspectives on the experience of disaster in our past.

Two factors have been lacking in these approaches, however. First, the focus of a majority of these studies has been on Europe and, while a few exceptions stand out for the global north – notably Australia (McKinnon and Cook, 2020; Jones, 2017) and China (Courtney, 2019; Janku, 2007) - Eastern Asia and Australasia have generally been under-represented in the literature. Second, the role of political or governance frameworks in creating or framing hazards has been insufficiently addressed in the historical focus for this region, leaving a gap in the understanding of the fundamental dynamics in how a disaster played out. This is especially acute when thinking about scientific understandings of atmospheric/climatic events and specific historic contexts, including war, in impacting on the nature and scale of disaster. The history of disaster in Asia has special applicability in today's era of anthropogenic climate change, as it is one of the most disaster-prone regions in the world, one where such events are set to rise and where stark contrasts exist in political governance and developmental trajectories. As many scholars have argued, understanding regional or local context in nature-induced disaster is not only a geographical issue but a cultural one and should be understood in local context (Bankoff and Christensen, 2016; Schenk, 2012; Janku, 2012; Bankoff, 2003; Blaikie, 1994).

This special issue thus showcases different ways of using historical narrative, historical method and historical case-studies as alternative routes into understanding frameworks of disasters. It focuses in particular on atmospheric rather than geological processes that are often, though not solely, linked to human anthropogenic or direct action such as nuclear antagonism, urbanisation, climate change and the interplay of natural stimuli with man-made disaster. Leslie Mabon, for example, analyses the language and content of scientific publications generated by a Fukuoka-based not-for-profit environmental organisation, to explore how attitudes towards

urban heat have shifted and developed over forty years. Critical to his argument is the idea that current-day urban adaption to the issue of extreme heat in cities can only be understood in context of the longer narrative, as only then can we see the underlying motivation or justification for contemporary strategy. Fukuoka itself offers an interesting study, grounded as the city is in a long national history of managing earthquake, tsunami and typhoon, yet Mabon shows this is not the whole story. He argues that disaster risk policy should be supplemented by Fukuoka-specific engagement with climate research and with stakeholders, as part of a localised socio-political point of scientific engagement with the issue of climate change and thermal comfort.

Both Lisa Yoshikawa and Gerry van Klinken chose to focus on comparative historical case-studies, using archival sources and historical methodologies to explore significant disastrous events that affected Japan, the Philippines and India before the mid-twentieth century. Uniting these two pieces is an implicit recognition of how contemporary politics and governance affected the climate-disaster nexus. In Yoshikawa's exploration of multiple and co-existing flood narratives in Japan, she reveals how such narratives were used politically. First, by the imperial Japanese government as a means to strengthen the evolving, centralising nation-state, especially though provision of subsequent post-event relief and management. Yet, many communities developed competing narratives, often through the long-term experience of living with risk and the subsequent building of collective disaster memories, which narratives often surfaced in troubled relationships and contestation between state and periphery. Van Klinken explores resilience, considering how each typhoon in his study revealed an evolution in adaptive capacity, particularly due to bottom-up demands for disaster protection from the state. In his account, he shows that we should place greater emphasis on social history and cultural analysis in understanding disaster, especially to better identify the power dynamics inherent in typhoon-related disaster responses. This, he argues, is revealing of how disasters shape politics and disaster governance through citizen action, critically important as climate change induced disasters are set to worsen in the years to come. Both authors show how it is essential to understand the political contexts of disasters and disaster narratives in order to move forward.

Ruth Morgan's contribution takes a close lens to how by the 1950s, the southern hemisphere had largely been occluded from discussion of global climate studies. Employing methodologies from environmental history and the history of science, she probes into how Australian scientists contributed to not only bringing the south into the conversation, but toward taking a leading role in the study of global climate change by the 1980s. The nation's political interests and geopolitical position - especially in relation to local impacts of global atmospheric changes and emissions and Australia's prime geographic location to monitor such impacts for the south - were key to this massive shift in knowledge making. Like Mabon, Morgan reveals that these processes can be revealed through study of policy statements and research output since the 1970s. The fear of a nature-induced disaster prompted by especially acute El Niño events, say that of 1982/3 that resulted in widespread drought, dust storms and bushfires in Australia, was a major instigator for local politicians and scientists to press for better representation and 'relocalisation' in globally situated scientific organisations and research. As other authors also

highlight, the potential for man-made circumstances – such as nuclear war – to impact on local climates was also a factor in Australian research impetus and trajectory.

Matthias Dörries also analyses scientific publications as a way into his subject, in context with semi-scientific and newspaper articles. From this broad scope, he has been able to identify the existence of two main counter-narratives concerning disaster that can be broadly allocated to popular or academic outputs, in similar vein to Yoshikawa's dual popular and governmental narratives. Centring around what he terms the 'energy' versus 'precaution' arguments in the context of hydrogen bomb testing in the Pacific Ocean atolls during the 1950s, Dörries' study of opposing narratives show how the energy argument tended to belittle the potential for thermonuclear bombs impacting global weather, in comparison with the energies involved in winds and storms. In contrast, the 'precautionary' side stressed the possibility of irreversible damage to the environment or climate. He argues that the promotion of the energy argument was closely aligned to political interests, especially in the US and the UK, revealing a close alignment of science, politics and national sentiment in these countries in the mid-50s. Ultimately however, public pressure globally, following precautionary lines, came to dominate the war of words. The focus on nuclearization during the Cold War allows Dörries to re-read some of the current interpretations of these events, especially the idealisation of an irrational public versus a rational scientific body narrative, the latter supposedly detached from political concerns. The paper shows us how historical documents can shed light on changing opinion on the scientific explanations used for risk management and risk communication, as they are quickly overturned by research in different political or scientific contexts. This message, along with those put forward by Morgan and Mabon, reveals the necessity of understanding the time-specific and cultural dimensions of planning for risk.

The long temporal range of these articles, moving through history to the present day, invites the opportunity to reflect on how our present has been shaped through the experiences of the past; how these narratives shape our current responses and capabilities through science, policy, or politics and can offer lessons in past failures or success. They are also revealing of how socio-cultural and political readings of disaster events or literature can help us better understand, say, the evolutionary processes of adaptive capacity or the scientific narratives surrounding risk. Historical studies do not have all the answers but, they can open doors to reflection on the myriad dynamics that could, or are, shaping modern disaster prevention and management.

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