Paper ID	144
Author(s)	Justine Walter
Title	Be warned! A comparative perspective on strategies of disaster risk reduction in early China
	and ancient Europe

### Abstract

Earthquakes are a common phenomenon both in the Mediterranean and in many regions of China. Faced with these unpredictable, unavoidable, and sometimes unmanageable shocks, ancient civilisations at both ends of the Silk Roads developed what we now call disaster risk reduction strategies. Some of these strategies are documented within ancient sources and testify to the impact of culture, infrastructure, and political allies on successful coping with disasters.

This paper will present a selection of documented cases of earthquakes in pre-Han and Han China, ancient Greece and the Roman Empire in a comparative perspective. Both common aspects and culturally determined differences in disaster risk reduction strategies will be discussed. Finally, considerations are made as to what these ancient case studies can teach us for the future of disaster risk reduction in the age of AI and the Anthropocene.

Keywords	Disaster Risk Reduction, Earthquakes, Ancient History, China, Mediterranean
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Paper ID	154
Author(s)	Ken Kawamura
Title	Allegories of disaster: Ethnomethodological analysis of Japanese disaster novels

### Abstract

Disaster scholars have argued the significance of the memorial practice of disaster that shapes its collective memory and meaning. Literary fiction is a crucial medium for making sense of disaster. This study elucidates the textual methods contemporary Japanese novelists deploy to represent the unspeakable realities of disasters. Faced with inexpressible disaster, modern novelists have relied on the technique of realism, depicting the minute details of the victims' lives through the event, sometimes based on the real testimonies and memoirs of survivors. Contrastingly, the literary critic Karatani Kojin positions Oe Kenzaburo's nuclear novels as the opposite of such an attempt. According to Karatani, Oe tries to present "the allegory of the nuclear era" in those nuclear novels based on the idea that "the world fundamentally has meaning." By so doing, Oe's nuclear novels have been given a wide berth by other mainstream literary critics of the 1990s for their explicitness of the theme. In this vein, I also aim to broaden the scope of analysis to include other contemporary Japanese writers who have tried to tell a story of natural disasters in a way quite different from depicting the minute details of the event. Murakami Haruki's After the Quake is a good example. In the short story collection, Murakami voices bystanders of the Great Hanshin Earthquake, thereby trying to grasp the tragedy. By comparing these writers' methods, I will shed light on the similarities and differences in their attempts to make sense of disaster.

Keywords	Disasters, Humans, Literary Fiction, Ethnomethodology	

Paper ID	168	
Author(s)	Su-Bing Chang	
Title	The Fantasy of Land Subsidence	
Abstract	Abstract	

Taiwan's West Coast has suffered from land subsidence since the 1980s, largely due to the overexploitation of groundwater in the name of aquacultural and agricultural industries. The seriousness of land subsidence has even threatened the safety of Taiwan's High-Speed Railway starting from the 1990s. The authorities, despite efforts to promote environmental education directed at the local students, residents, and farmers, have all had little effect.

Yang Shun-fa, a working-class amateur photographer, displays his long-standing interest in Taiwan's West Coast from a ""down to water"" viewpoint. Since 2015, he has published a series of photography works entitled The Submerged Beauty of Formosa and Taiwan To Go.

Moreover, a road film, Godspeed (2016), highlights the subsidence landscape as means to express solitude and hopelessness. Another romantic comedy, My Missing Valentine (2020), uses the subsidence landscape to create a vivid "fantasy" atmosphere.

The deserted area of land subsidence, thus, has suddenly attracted many movie fans to check out the featured locations. Now, outsiders frequently post pictures on social media, some of them including influencers and Instagram models; this change in image has allowed the land of subsidence to now become a "Land of Fantasy." By the same token, this has naturally sparked off a dialectic between reality and idealization.

People are used to thinking about Taiwan from a land-based perspective, at the risk of ignoring the obvious fact that we are an island country in the middle of the sea.

Keywords	Water, Land, Disasters
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Paper ID	213
Author(s)	Qing Pei
Title	Institutional willingness to address impacts of climate change and natural disasters:
	Understanding imperial silk consumption in mid-Qing China

### **Abstract**

A quantitative approach has been promoted to understand the history of climate and society. Statistical research on luxurious expenses under climate change in past societies remains insufficient, however. Hence, this study statistically examined the association between climate change and the imperial court's luxury expenses on silk products in mid-Qing China (1735–1840 CE) by including major ecological–social–economic stresses. Results indicated that the Qing imperial court's silk consumption increased under favorable climatic conditions and a flourishing agrarian economy, and vice versa. Natural disasters and social crises hardly affected the Qing imperial court's silk consumption, however, suggesting its limited support and inactive attitude toward ecological–social–economic stresses. Such an institutional weakness might have increased social vulnerability, which could have led to Qing China's decline since the eighteenth century. The study serves as the first attempt to reveal a long-term historical climate–luxury linkage and further provides a supplementary explanation of the economic decline from the perspective of the history of climate and society. Based on past lessons, this study emphasizes institutional activeness to tackle upcoming climate change challenges.

Keywords	climate change; ecological-social-economic stress; institutional attitude; mid-Qing China; silk
	consumption

Paper ID	124
Author(s)	Heli Huhtamaa
Title	Far-flung disaster: Global consequences of the 1600 CE volcanic eruption

## Abstract

In 19th of February 1600 CE, Peruvian volcano Huaynaputina started to erupt. This released large amounts of sulphur compounds in the atmosphere, which soon oxidised into sulphate aerosols that started slowly circulating across the globe. These volcanic aerosols reflected incoming solar radiation back to space, and, as consequence, Northern Hemisphere experienced extremely cold temperatures in the following year 1601 CE.

The cold climate extreme caused crop failure and hunger across the hemisphere. Ireland, Norway, Sweden, Finland and Estonia recorded frozen yields and human misery. In Russia, the 1601 crop failure coincided with a period of internal political turmoil, the so-called Times of Trouble. There, the food shortage escalated into devastating famine, taking the lives up to 2 million people.

This poster demonstrates the spatial and temporal extend of the climatic impacts of the 1600 eruption(s), as well as detect some of the most fatal human consequences of the disaster. By doing so, I wish to demonstrate how a natural hazard on one side of the globe might trigger a societal disaster on the other.

Paper ID	136
Author(s)	Niklaus Emanuel Bartlome
Title	Exploring the past global climate - ClimeApp: Data processing tool for the ModE-RA Global
	Climate Reanalysis

# Abstract

ClimeApp is a newly developed web-based data processing tool for the state-of-the-art ModE-RA climate reanalysis. It presents temperature, precipitation and pressure reconstructions with global coverage and monthly resolution over the last 600 years. These can be visualized and customized as maps or time series. Furthermore, the app allows integration of historical information with climate data through composite, correlation and regression functions. The ModE project itself contains three data sets - ModE-RA, ModE-Sim and ModE-RAclim - all accessible through the app. It also allows for visual exploration of the huge array of source material used in the ModE project. To showcase the app, this poster will look at the regional climate impacts of two major volcanic eruptions - the Koma-ga-take/Parker eruption (1640/1641), and the eruption of Krakatoa (1883) - showing how they can be investigated using the functions and applications of ClimeApp and the ModE database. Since such natural disaster events can also severely impact human society, the poster will also compare these climate impacts to contemporary historical data, using functions within ClimeApp. This will demonstrate how ClimeApp can be used not only in research, but also in teaching and science communication, as well as highlighting the potential for similar interfaces in other disciplines. ClimeApp is available at https://mode-ra.unibe.ch/climeapp/

**Keywords** Disasters, Humans, Volcanic Eruptions, Palaeoclimate, Web tool