

The San Andreas Fault, stretching over 1,100 kilometers from Mexico to San Francisco, is source of the frequent earthquakes in California. This tectonic boundary between the American Plate and the Pacific Plate is one of only a few that are visible on the surface.

# LANDSCAPES OF DISASTER

## Symbolic Spaces of Orientation

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Great historical natural disasters changed the view of the world. Until recently, we comprehended dramatised landscapes by identifying ourselves with the victims. Catastrophes appeared to be phenomena of definable coordinates, thus making it possible to orient ourselves. The 21st-century landscapes of risk now brought upon us as a result of climate change appear to be understandable in neither a spatial nor a temporal fashion, however. This has deprived the landscape of its symbolic orientation.

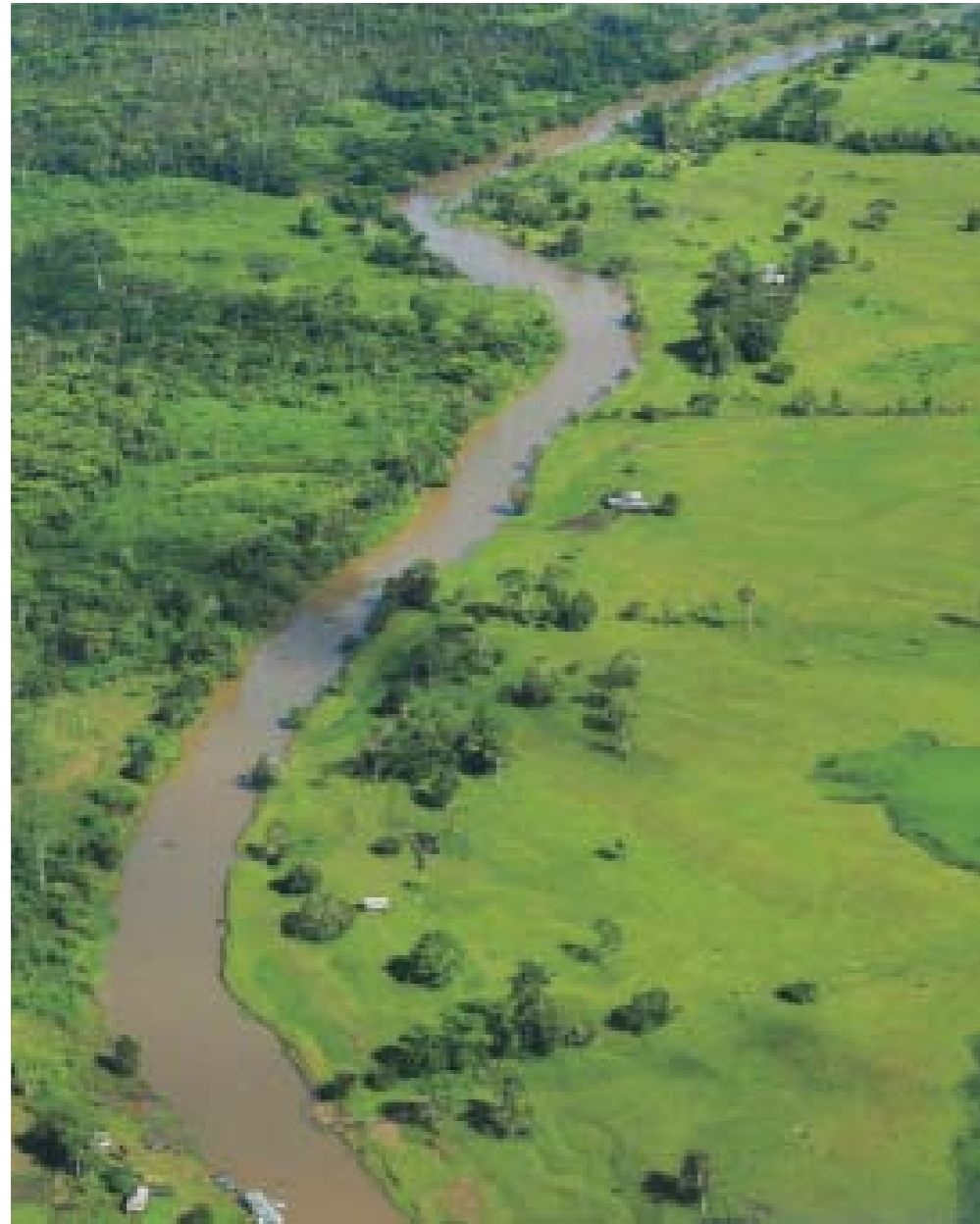
The 1755 Lisbon earthquake presumably killed up to 100,000 people and the fires that then raged for days completely destroyed the Portuguese capital. It lasted only a few minutes, but the earthquake shook not only a city but the entire world, and is considered the first catastrophe of modern times. Never before had a broader cultural sphere, beyond the national boundaries of a region directly affected by a disaster, mentally participated in such an occurrence. The tragedy of Lisbon created a European public who attempted to make sense of the catastrophe.

The intelligentsia of the day – Goethe, Voltaire, Kant and Lessing – saw the earthquake as a sign of the questionable nature of divine intention and the human order associated with it. It motivated intellectuals to call into question the legitimacy of the aristocracy's God-given rights. Kant's research and writing about the Lisbon earthquake established the scientific exploration of natural catastrophes and laid the foundation for seismography and geography. In retrospect, the earthquake in Lisbon signalled a new way of thinking about natural catastrophes,

coupled with new approaches to dealing with the horrors of nature and the world that were based on the optimistic belief that nature could be tamed, on the scientific exploration of the "rebellious earth," and on the technology intended to prevent and alleviate human suffering caused by nature.

### Landscapes of catastrophe

After the Lisbon earthquake, a rational and technological view of natural catastrophes became dominant, and an emerging belief in progress and an objectified view of volcanic eruptions, earthquakes, tsunamis, tornados, floods, storms and other threatening natural occurrences has prevailed. Science, engineering and planning have proven to be very successful in convincing people that they can indeed defend themselves against the forces of nature. This has been accompanied by an understanding of the landscape, in which danger is a calculable risk and points of orientation can be identified that can mark such risks. Then points of



Land use change is the biggest anthropogenic-related contributor to greenhouse gases. Near Manaus, the capital of the Brazilian state of Amazonas, people are deforesting big areas of land for cattle ranching and agriculture in order to make their living.

escape, emergency exits and other security-oriented responses can be integrated into the landscape in response.

The landscape of disaster is no longer perceived as shrouded in evil or a place of horror. Instead, it has become a predictable and manageable space, an environment of orientation. This was not possible in the pre-modern era, when the landscape could only be understood as a dual space that had an entrance and possibly an exit to either fortune or misfortune. Passing through this gate was a characteristic theme of an ancient, mythic landscapes, where Olympus as the realm of the gods, and the underworld, Hades, were thought to coexist with the earth and human lives. Catastrophes were the moments when, as the result of a sudden event (*katastrephēin*) that an individual had no control over, a person made transition from one fortune to another. The ancient Greek landscape was thus an environment of permanent fear, in which orientation could not be achieved through rational means but only through the development of an act of symbolic cleansing.

### The landscapes of drama

The processing of natural catastrophes in ancient Greece was done according to a ritual of dramatisation. The enacting of catastrophes in plays allows participants to become involved with the frightening events on stage, where the audience lets the hero suffer on their behalf. Our current thinking about natural catastrophes has not yet overcome the dramatised view we have of volcanoes, earthquakes and other crises, and indeed the global media has merely replaced the ancient stage. We continue to search in these landscapes for victims with whom we can identify and have empathy for, in order to make a human orientation possible in a chaotic flood of lava, masses of displaced rubble, or a huge tidal wave. The dramatised landscape of crisis be-

comes temporally controllable for the observer as he either mourns the victims and abandons them or knows they have been helped and are in good hands. The dramatisation of disaster makes it possible to imagine and lead a normal life in an otherwise uncertain environment. The intention of this ritual of orientation in the landscape, and control over one's own fear, is not to overcome natural disasters as originally hoped by the intellectuals of the Enlightenment and engineers who promote our faith in technology. In the current media depiction of the landscapes of catastrophe there is a mixture of technological hope for a predictable future and an emotional catharsis of our fears that was characteristic of ancient, theatrical rituals.

### Landscapes of disaster

If landscapes are understood as symbolic spaces of orientation, the landscape of catastrophe and drama does no justice to current interpretations of Fukushima and the affected region surrounding it. Catastrophe and drama are fundamentally different in their understanding of space and neither includes the elementary character of a disaster. While a catastrophe is a temporally limited spatial phenomenon with limited coordinates – even when extended, expanded, or disgorged, or described with other spatial metaphors – the dramatised landscape primarily reveals a sense of orientation to the outside observer, as it shows victims and damage, and spatially expresses a tale of prediction, dramatic moment and recovery.

And yet, faced with the reality of an entire region that is contaminated with nuclear radiation, neither the ancient nor the modern view of a destroyed landscape can offer orientation to observers and victims, or to planners and artists. In a postmodern sense, the risk landscapes of the 21st century, which include landscapes repeatedly threatened and blighted by climate



Vehicles ready for shipping have been carried off by a tsunami tidal wave at Hitachinaka city; collapsed houses and debris remain on a field in Kesenuma, Japan. Thousands of people were killed in March 2011; even a high-tech country is not able to combat the force of nature.



In 1986 a nuclear accident at the Chernobyl reactor in the Ukraine released a large amount of radioactive material. More than 350,000 people had to be evacuated from an exclusion zone of 30 kilometers. The former cultural center “Energetik” today remains a memorial for the evacuated Pripjat, formerly a town of 50,000.

change, will offer only a sense of confusion, and neither a ritualised landscape perspective nor optimistic technological and engineering approaches of rational problem-solving will be able to control this. These landscapes will only be understandable as places where the floods or other “natural” catastrophes that are part of global climate change are explainable beyond localisable causes, as part of a causal chain of human activity in a complex relationship with nature. Flooding in Bangladesh is no longer catastrophic in the sense of a surprise or an ancient perspective of fate in this environment, and it will also not be avoided through the use of expensive (and therefore nonexistent) flood management measures because the multiple causalities of the disaster also have a variety of mutually influencing repercussions.

The new landscape of disaster goes beyond the symbolic order that arises from the landscape itself, an order represented by the abyss in the Hellenistic world and which allows the

signposting of risks through landscape planning and engineering. The post-Kyoto Protocol landscapes that will emerge as a result of the unstoppable process of climate change will make it impossible to assign causes and effects of natural catastrophes in a geographical sense and will also separate them spatially. They will have to exist as supermarket signs that warn of devastation in Africa, flooding in Asia, and the deforestation of the Amazon region, and that are already visible on Fair Trade stickers and WWF buttons. The imaginary landscape of disaster no longer has a location that can be cartographically defined – such as the earthquake in Lisbon – or temporally defined – like the catastrophic storms of ancient mariners. Our ideas about this are just beginning to take shape, and the slogan of the anti-nuclear movement Chernobyl is Everywhere is becoming the global experience of new landscapes of crisis that allow neither symbolic nor technological orientation.