## Editorial

All but one of the contributions to this issue of *Tidsskrift for kulturforskning* originate from a seminar held on 7 December 2007 at the Department of Culture Studies and Oriental Languages, University of Oslo. The topic of the seminar was "Nature's unnatural history", and its aim was to shed light on how shifting ideologies, moral standards and cultural patterns and conceptions have influenced human understandings of nature and science. Fortunately, the three speakers, Brian Ogilvie, Nigel Rothfels and Helge Kragh, all agreed to convert their oral presentations into articles, while Camilla Ruud has written the fourth article especially for this issue. To expand the perspectives that we find in the articles themselves, each is followed by a commentary.

In late sixteenth and seventeenth-century Europe, natural phenomena were studied and presented by scholars and artists. In his article "Nature's Bible: Insects in Seventeenthcentury European Art and Science", Brian Ogilvie demonstrates that the study of insects is a good introduction to understanding the ideas and culture of a period, as well as the entomology of the time. The knowledge of insects was compiled through verbal descriptions as well as through illustrations produced and shared by practitioners from natural history, miniature painting, medicine and anatomy. Ogilvie focuses on how and why insects were studied in the formative years before this area of study was developed into its own discipline and given the name entomology. By examining how insects are represented in the works of collector and encyclopaedist Ulisse Aldrovandi, landscapes painter and miniaturist Johannes Goedart, physicians and anatomists Martin Lister and Jan Swammerdam, Ogilvie explores "the shifting relationship between natural knowledge of insects, moral lessons drawn from them and secular theology." Important here is the notion of the impermeability between the fields and the status of iconographic representation. In her comment on the article, Brita Brenna introduces the sea serpents described by Erik Pontoppidan into the realm of natural wonders of early modern Europe.

The Earth has a history but does this mean a history in the humanist meaning of the concept? In his article "The Arrow of Time and the Historization of Nature" Helge Kragh discusses the reconceptualization of nature from being understood as static to being seen as dynamic, as well as later suggestions made by philosophers and natural scientists that the laws of nature vary in time. The idea that nature is subject to change, and therefore has a past, was pioneered by Nils Stensen and his contemporary Robert Hooke. This process was a change from better to worse. The concept of entropy as a measure of the disorder of a system, as introduced by Rudolph Clausius, and his statement that the disorder of a system steadily increases, ending in a state with no life, gave a final direction to "the arrow of time" in the history of nature. As Kragh states, the law of entropy was a law of evolution, but while Darwinian evolutionism implies increasing complexity and progress, entropy leads to decay. Interestingly this law has inspired historians. The history of the Earth and the universe is studied as retrodiction, and the first step towards finding knowledge on how it came to be is to scrutinize observed effects and material remnants of nature. This is very much how historians work. And as Anne Eriksen points out in her commentary, the modern concept of history and historicity emerged gradually in the eighteenth century, in part because of the new scientific insights into Earth's history.

How have elephants been seen in the West, and particularly why have the eyes of the elephant been so central in the development of ideas and assumptions on the nature of this animal? These are the key questions Nigel Rothfels poses in his article "The Eyes of Elephants: Changing Perceptions". Rothfels distinguishes the first two decades of the twentieth century as a "watershed moment in ways of thinking about elephants in the West", and in this the elephant is but one example of how nature has been imagined by many over the last century. Using two photographs of elephants taken about a hundred years ago as his point of departure, Rothfels juxtaposes how they were seen and understood by contemporary viewers with a probable reception of the photographs today. Rothfels claims the difference is found in a concern about the animal's needs and welfare. In this the eye of the elephant has become a symbol of the late modern elephant as *Elephas dolens*, the suffering elephant. This image of the elephant has little if nothing in common with the way the elephant was seen in antiquity and for many centuries, i.e. as *Elephas horribilis*. The idea of the horrible elephant was challenged by Buffon's characteristic portrayal of the elephant and gave way to an understanding of the animal as an affectionate beast, *Elephas sentiens*. To understand how the perception changed from *E. sentient* to *E. dolens*, Rothfels points to the growing critique of big game hunting from the second half of the nineteenth century, and the many eyewitness descriptions of suffering elephants, descriptions in which the eye of the animal was central to the creation of meaning. As Inger Johanne Lyngø points out in her commentary, the look and what we see are conditioned by who we are, "different times have different looks".

How do we construct Africa at the northern edge of the world? In her article "A zoological nature", Camilla Ruud analyses the new Africa-section that was opened last year in Kristiansand Zoo and Amusement Park. The main attraction is four Dano-African lions, and Ruud's concern is to identify the "zoo-logic" involved in creating an environment fit for the display of the lions. As Ruud demonstrates, zoo-logic brings together different and often contradictory aspects of the Zoo enterprise. By deconstructing mental installations, the artificial landscape and the way the lions are mediated, Ruud finds an Africa connected to a zoo-logic in which themes appear as relations between humans and animals, wildlife conservation and human responsibility towards nature. A striking paradox lies in the tension between the lions' protected enclosure and their permanent observation by a web camera. Historically there has been a close link between the Norwegian sovereign and the king of animals. The lions in Kristiansand have been staged primarily as an attraction for children. This dethronement of the lion is developed in Liv Emma Thorsen's commentary.

I hope readers will enjoy following insects, sea serpents, elephants and lions into shifting ideas and perceptions about the construction of knowledge of nature, the natural and the human.

Liv Emma Thorsen Guest editor