

Kulturgeschichte des Klimas: Von der Eiszeit bis zur globalen Erwärmung, by Wolfgang Behringer (München: C.H. Beck, 2007; pp. 356. Eur 22.90).

Wolfgang Behringer discovered the attraction of climate history in his path-breaking investigation on witch-hunting and weather magic during the Little Ice Age (1995). His recent publication embraces the entire history of the earth, climate and mankind, from the Big Bang to the publication of the latest IPCC report in 2007. He focuses on Central and Western Europe, where he is most familiar with the literature, with side-glimpses of the situations in the Mayan kingdoms, Japan and China. As his history unfolds, he distinguishes between warm and cold periods and highlights mankind's ability to adapt to those changes. Climate is seen as the primary agent for change, whereby Behringer rates warm periods positively (such as 'Europe's happy Bronze-Age') and cold periods negatively. This dual mode of presentation is well adapted to those long periods of the earth's history for which the available evidence of human motivation is limited.

Behringer sticks to this concept in his description of the last millennium, even though written sources, which would allow an assessment of the significance of

climate as a historical agent in a multi-causal perspective, become increasingly available. In discussing the 'warm period' in the High Middle Ages (*Hochmittelalterliche Warmzeit*) (c.AD 1000 to 1300), he overtly intervenes in the political climate-change controversy between the scientific community and the so-called sceptics. The first IPCC report (1990)—based upon the influential work in the 1970s of Hubert H. Lamb (who was among the first authors to show a relationship between the history of climate and cultural history)—postulated that summers during this period were about 2°C warmer than those in the twentieth century. Since then, research has refuted this claim. Behringer, however, clings to it as he attempts to present evidence to challenge the dominant theory of climate change, albeit without the necessary competence in (historical) climatology. He poses the question, for instance, 'If it was warmer in the twelfth century without human interference, why should the recent global warming not be related to natural causes?' (p. 103). In order to support his argument he postulates, among other things, 'a longer heat period between 1021 and 1040', even though for this period contemporary evidence from chronicles is extremely limited. Another of his arguments, namely that in some regions Viking graves are still embedded in permafrost, is not sound because, even after rapid warming, it takes some time until permafrost thaws. Behringer's picture of High Medieval climate is chaotic: instead of presenting his evidence in chronological order and according to seasons, he jumps back and forth from one century to another, thus jumbling longer-term trends with short-term extremes. In his discussion of the Little Ice Age (c.1300–1900), Behringer fails to point out that the concept cannot be simply based on relating the position of glaciers to dominant trends in the climate. Despite the relatively advanced position of glaciers (allowing for considerable fluctuations), the 'Little Ice Age' was not a monolithic period of cold climate. Apart from colder winters and springs, there were no longer-term tendencies with regard to temperatures. Moreover, annual temperatures in some periods, for example 1500 to 1560, were only a little below the twentieth-century average.

The issue of how the populations of different societies have perceived weather and climate, and how they responded to it, is situated in a cultural context which is only to a limited degree, if at all, related to stimuli of the natural world. The fundamental difference between scientific reconstruction of temperature and attitudes to that weather—precipitation on one hand and people's images of extreme weather on the other—should have merited more thought and discussion; not least because the author is an expert in this field.

The path from the ages of religious fanaticism to the industrial period is highlighted from two perspectives, the liberation from hunger through the history of institutions and the building up of transport infrastructure on the one hand and the demystification of the world through the Enlightenment on the other. Behringer tries to provide a complete picture of these developments in a few pages, thereby causing his description to become little more than an enumerative list. The discovery of global warming provides him with a narrative bridge from the late nineteenth century to the present.

All in all, the author draws too much on outdated literature and many statements are not supported with evidence. Behringer's cultural history of climate will hardly convince critical historians or remove the prejudices of sceptical scientists against historical approaches.

CHRISTIAN PFISTER
University of Bern