

NATURE AND POWER

This book aims to demonstrate that the changing relationship between humanity and nature is a key to understanding world history. Humans have been grappling with environmental problems since prehistoric times, and the environmental unsustainability of human practices has often been a decisive, if not immediately evident, shaping factor in history. Ironically, the measures that societies and states have adopted to stabilize the relationship between humans and the natural world have repeatedly contributed to environmental crises over the course of history. *Nature and Power* traces the expanding scope of environmental action over the course of history: from initiatives undertaken by individual villages and cities, environmental policy has become a global concern. Efforts to steer human use of nature and natural resources have become complicated, as *Nature and Power* shows, by particularities of culture and by the vagaries of human nature itself. Environmental history, the author argues, is ultimately the history of human hopes and fears.

Joachim Radkau is Professor of History at Universität Bielefeld in Germany. His books include Die deutsche Emigration in den USA, 1933–1945 (1971), Deutsche Industrie und Politik von Bismarck bis zur Gegenwart (in collaboration with George W. F. Hallgarten, 1974), Aufstieg und Krise der deutschen Atomwirtschaft (1983), Holz: Ein Naturstoff in der Technikgeschichte (in collaboration with Ingrid Schäfer, 1987), Das Zeitalter der Nervosität: Deutschland zwischen Bismarck und Hitler (1998), and the biography of Max Weber, Die Leidenschaft des Denkens (2005).



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Nature and Power

A GLOBAL HISTORY OF THE ENVIRONMENT

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and





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Preface to the German Edition

The night before I began working on this book I had a nightmare: seated in a small, rickety airplane somewhere over Russia, I was going through one landing after another on bumpy runways. Aware that the plane had nuclear bombs on board, I was trembling in a state of constant panic. Fortunately, I soon awoke. The dream was not difficult to interpret as the barely concealed expression of a feeling of unease. I used to dismiss global overviews in environmental history and called for a "middle level." Now I myself was venturing into world history: would I find reasonable landing places along the way? Would the many years I spent in the field of nuclear technology prove to be risky baggage? What did the ecological and economic disaster of the communist bloc mean for that kind of environmental history whose basic assumptions would have led one to assume that a socialist state-run economy would be able to undo the environmental damage caused by the private profit motive?

Some time after my fiftieth birthday, I came across a reference in an article on the history of forestry in India to an ancient Indian ideal of the human life cycle. According to this idea, it behooves a person at the age of fifty to venture into the forest in search of the truth. That idea appealed to me, since the history of the forest has long been one of my favorite topics. But what is the historical wisdom with which one returns from the forest? It is surely not as thunderous as that of the prophets who come from the desert; instead, it is quiet, restrained, occasionally muted, like light falling through the leaves. An environmental historian who has absolute certainty about what he does need not go into the forest at all.

Eric L. Jones once remarked that to write universal history, he had to transform himself from a hedgehog into a fox.² As for myself, ever since acquiring my own garden, I have turned increasingly into a hedgehog, intellectually too, and I have often had the feeling that the secrets of history are hidden above all in microcosms and therefore elude the habitual globetrotters. World history can achieve genuine breakthroughs only with the help of regional field research. Whenever there was a doubt in my mind as I was researching this book, I therefore tended to give credence to works with such a local flavor. But at times, even regional studies are constructed around more generalized images of history and are therefore often strikingly similar. Once in a while one must range further afield to discover local peculiarities. Even Oliver Rackham, who never tires of mocking a pseudo-universal environmental history that is built on sweeping preconceptions,

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has confessed that it was in Texas that he came to change his views about English hedges.³ If one wanders over the terraced fields of Mallorca, the Himalayas, and the Andes, one gets a powerful, ambivalent feeling: in some ways everything seems very similar, but in some ways also very different. It is not a bad thing to acquire, on foot, a foundation of emotional insights into environmental history.

One thing that makes environmental history so attractive is that it encourages one to discover history not only at "historical sites," but also in the sweep of the landscape. It makes one realize that traces of human history are found nearly everywhere, even in what seems like wilderness: in eroded mountain worlds, in the steppe, in the jungle. In my own case, the joy of roaming about is heightened by the pleasure – too often suppressed – of wide-ranging reading: everything from the "commentaries" of the Inca prince Garcilaso de la Vega to the *Secret History of the Mongols*, depending on the landscape. Now and then, environmental history needs the "wandering gaze." Faith in nature includes the confidence that, in the end, all the colorful diversity will give rise to a new order – the outlines of a new kind of world history.

It has become clear to me, especially at conferences on environmental history in the United States, that however much I admire the productivity of American environmental historians, the time has come to incorporate the experiences of the Old World more thoroughly and consistently into the discipline: to examine not the cult of "wilderness," but questions about sustainability in old cultural landscapes; to analyze not the imagination of Native Americans, but institutional traditions. I am indebted to Frank Uekötter — my intellectual sparring partner of many years — for insights that institutions and organizations contain an important key to an environmental history that rests on solid ground, insights that I initially resisted.

The Global Environmental Conference in Rio de Janeiro in 1992 elevated sustainability – in the sense of a careful stewardship of natural resources to preserve them undiminished for future generations – into the guiding goal for the global economy. In German forestry, this principle has a history stretching back centuries. For critics today, "sustainability" is a linguistic shell that legitimizes the exploitation of nature; but history can help a great deal to impart color and substance to this concept. The history of the forests, in particular, reveals also the ambiguity of this concept, as well as its capacity to be manipulated. Still, a better alternative is not in sight.

I have repeatedly ridiculed the stereotypical thinking and unexamined contradictions within environmental history: for example, on the one side the refrain "We have seen all this before" (namely the destruction of the forests, overexploitation, river pollution), and on the other side the hymn to the Native Americans' primal harmony with nature. Or on the one hand the pessimistic image of "human history as the history of the destruction of nature," and on the other the revisionist concept of "humanity as an episode in the eternal transformation of nature": so far, these opposing positions exist in their own separate worlds, disconnected from each other. This absence of a discussion has its reason, however: the majority of empirical studies are so limited in their range that they never even get to the fundamental questions. That is another reason why I believe it is high time to attempt

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to write environmental history in such a way that a wisdom of the woods becomes conceivable – if only through the countless shortcomings and weaknesses that are an inevitable part of such an endeavor.⁶

Joachim Radkau, Spring 2000



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Some time ago I was talking about Rachel Carson with a German scientist who had been involved for decades in the environmental and women's movements. To my consternation, she asked: "Who is Rachel Carson?" I responded that she was to the American environmental movement what Joan of Arc was to French nationalism. This episode reveals how deeply the Atlantic still separates the environmental movement on its opposing shores and the degree to which that movement still lacks a global historical awareness – a genuine global awareness, not a putative one.

Surprises of a very different kind are also possible. The Global 2000 Report to the American president about the state of the global environment appeared in 1980 in an affordable German edition (1,508 pages) and became a bestseller and the Bible of the German environmental movement. As it was generally believed that the report had a similar impact in the United States, I was greatly astonished to discover that Global 2000 had received far less attention in that country.

Many German opponents of nuclear technology know nothing about the American origins of the protest against nuclear installations. On the other hand, many American environmental activists seem largely unaware that this form of protest had far greater long-term effects in Germany than in the United States and that it was the origin of the environmental movement in West Germany, France, Italy, and even Taiwan. In Carolyn Merchant's comprehensive *Guide to American Environmental History* (2002), nuclear energy is not a major theme, nor was it in a previous textbook she edited, *Major Problems in American Environmental History* (1993).² The *American Encyclopaedia of World Environmental History* (2004) has no entry on "Chernobyl." By contrast, the catastrophic accident at the Soviet nuclear power plant in April 1986 was seen in parts of Europe as the most important event in the environmental history of modern times (a perception, however, that was not to last).

All of this shows us how different the ideas are about what is and is not part of the "environment" and how little the environmental movements of the various countries know about each another, even when they claim to be thinking "globally." And since environmental history grew out of the environmental movement, the same is more or less true for this discipline. Even when it believes that its perspective rises above national narrowness, its mental horizon is often shaped by national traditions, more so than it realizes. Environmental history is in for many surprises if and when it learns to transcend these mental barriers. By looking at other countries one can suddenly notice elements in one's own country that



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previously seemed perfectly normal. I myself was led to rethink my own positions through conversations with American friends. For instance, I became much more keenly aware that my book had been shaped, in its contemporary references, by a political situation in which the Green Party in Germany had entered the halls of power on the federal level and in many local and regional governments, giving rise to the concern that it might succumb too quickly to the temptations of bureaucratic power. At present, the situation in the United States is very different, and things have also changed in Germany. As a result, the potential political function of environmental history has also been transformed. In Germany, environmental historians may have the future task of keeping alive the memory of the larger context that gave rise to environmental initiatives within a disintegrating environmental movement.

The present book owes an immeasurable debt to American and English environmental history, and it could not have been written without the model of a global approach that one can find in its scholarship. I hope that I have repaid at least some of that debt by revising the original German edition for this English translation. At the same time, I hope that some of the approaches typical of continental Europe can provide a stimulus to the international discussion. Unlike the Americans and the British with their immense colonial empire, continental Europeans have rarely lived with the illusion of unlimited resources. That there are "limits to growth" was self-evident to them most of the time: hence it was clear that prudence dictated a careful harnessing of limited resources. That does not mean that this bit of wisdom was always followed in practice. Still, a striving for sustainability has deep roots in Europe as well as in other old cultures.

Writing environmental history from the criterion of sustainability therefore does not mean projecting a modern slogan anachronistically back into past ages. Rainer Beck is surely right when he notes that long before German forestry administrations elevated sustainability into a doctrine in the eighteenth century, every peasant had to practice a more or less sustainable husbandry to ensure his very survival.³ By contrast, the concept of "wilderness," the fascination with which has shaped the American environmental movement and environmental history, makes no sense in the environmental history of the Old World; indeed, it leads one astray. In the Old World, the environmental historian needs to enlighten his readers first and explain foremost that most putative "wildernesses" are in reality old cultural landscapes and that their beauty can be preserved only by continuing ancient practices.

In revising the original text, I have tried to explain names and facts that an American or English reader cannot be expected to know and to give English and American experiences and perspectives more space than I did in the German edition. I leave it to the reader to judge how successful I have been. I have also tried to consider, as much as possible, the many discussions and reviews generated by the German edition and have introduced many new details.⁴ Above all, however, I have sought to bring out even more sharply the overall conception of the book, its basic lines and structures.

Reconciling all these intentions proved challenging. Again and again I felt torn between making the overall concept of the book more uniform and presenting the colorful diversity of environmental history in all its richness. In attempting to reconcile the two approaches, I learned much from working on a school textbook

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about environmental history, from the need to explain everything to the students as clearly and simply as possible to making the presentation vivid and colorful.

Impulses of a very different kind came from my work on a larger study of Max Weber's highly ambivalent relationship to nature. While Weber possessed a keen appreciation for the natural foundations of history, he was a vigorous opponent of "naturalism" in the social sciences - to be precise: of speculative and poorly thought-through naturalism. Engaging the ideas of Max Weber is therefore one of the hardest exercises one can imagine for a modern environmental historian, but Weber also offers a global environmental history a wealth of impulses to which the worldwide "Max Weber industry" has paid no attention. Perhaps most importantly, wrestling with Weber made me more keenly aware than ever before that for a historian, "nature" always means also human nature. There is a natura prima, which is unchangeable and shared by all humanity, and a natura secunda, which is subject to historical change, while never entirely breaking away from the first nature. This theoretical foundation of my environmental history, which I had initially absorbed more instinctively than consciously, along with all the consequences flowing from it, has become much clearer to me recently, in part also through the German-American conference "Turning Points in Environmental History" that I organized jointly with the German Historical Institute (Washington, D.C.) in Bielefeld in June 2005.

The vast majority and most surprising clues to hitherto unheeded aspects of American environmental history, and to a comparison between the United States and Germany, have come from my longtime friend and assistant, Frank Uekötter. For his magnum opus, a comparative history of how air pollution has been dealt with in the United States and Germany, he scoured archives from Stuttgart to Salt Lake City with a gargantuan appetite for sources. He uncovered differences in the American and German styles of politics, differences that reach back to the late nineteenth century and have received little attention so far, but also surprising commonalities, for example, in the early "environmental movement before the environmental movement." The prehistory of today's environmental awareness is far more extensive on both sides of the Atlantic than most people are aware of.

I would like to thank Christof Mauch, the director of the German Historical Institute in Washington, for supporting this American edition and Thomas Dunlap for his skillful and sensitive translation.

Finally, I would like to remedy an oversight in the original German preface: to express my abiding gratitude to my wife Orlinde, who has hiked the world with me for forty years, from the Andes to the Gobi desert, always urging her impatient husband to stop and observe the most minute details of nature. Many secrets of environmental history are hidden in these details: even with a global approach, that is something one should never forget.

Joachim Radkau, Bielefeld, October 2007