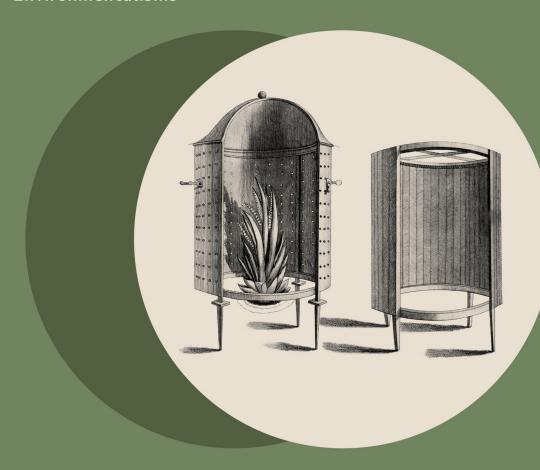
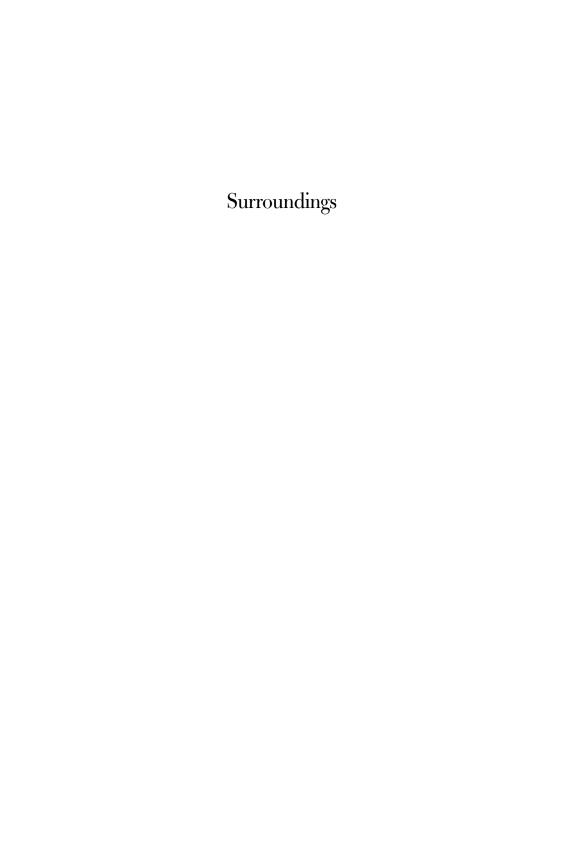
# Surroundings

A History of Environments and Environmentalisms



ETIENNE S. BENSON



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# A HISTORY OF ENVIRONMENTS AND ENVIRONMENTALISMS

Etienne S. Benson

# The University of Chicago Press, Chicago 60637 The University of Chicago Press, Ltd., London © 2020 by The University of Chicago

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articles and reviews. For more information, contact the University of Chicago Press, 1427 E. 60th St., Chicago, IL 60637.

Published 2020

Printed in the United States of America

29 28 27 26 25 24 23 22 21 20 1 2 3 4 5

ISBN-13: 978-0-226-70615-3 (cloth) ISBN-13: 978-0-226-70629-0 (paper) ISBN-13: 978-0-226-70632-0 (e-book)

DOI: https://doi.org/10.7208/chicago/9780226706320.001.0001

Library of Congress Cataloging-in-Publication Data

Names: Benson, Etienne, 1976- author.

Title: Surroundings: a history of environments and environmentalisms / Etienne S. Benson. Description: Chicago: University of Chicago Press, 2020. | Includes bibliographical references and index.

Identifiers: LCCN 2019042712 | ISBN 9780226706153 (cloth) | ISBN 9780226706290 (paperback) | ISBN 9780226706320 (ebook)

Subjects: LCSH: Environmentalism—History. | Environmentalism—United States—History. Classification: LCC GE195.B4638 2020 | DDC 363.700973—dc23

LC record available at https://lccn.loc.gov/2019042712

⊚ This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

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# INTRODUCTION

# What Was an Environment?

Although there is a sense in which the environment has always surrounded us, these days it somehow manages to seem more ubiquitous than ever. On the largest of scales, climate scientists warn us of the consequences of greenhouse gas emissions for our global environment, while planetary scientists, aerospace entrepreneurs, and writers of speculative fiction imagine what would be required for us to flourish in the harsh environment of space or on the surface of other planets. Back on Earth, conservation biologists and the administrators of national parks and other protected areas manage the environments of endangered species and ecosystems across vast swaths of land and water, while people whose lives depend on forests and fisheries worry about the continental and oceanic environments that sustain those resources. In cities and other heavily settled areas, public health experts and card-carrying "environmentalists" seek to reduce air and water pollution and other ambient risks. Meanwhile, health and safety specialists provide guidance for creating the most supportive and productive environments possible within homes, schools, and workplaces. We even carry our own environments around with us: biologists claim that what the French physiologist Claude Bernard dubbed our milieu *intérieur* in the mid-nineteenth century is vital not only to the functioning of our own cells and organs but also to the survival of bacteria and other nonhuman members of our microbiome, which in turn help us regulate our relationship to our surroundings. In that respect, we are environments just as much as we are *in* environments; we both surround and are surrounded.

If the environment seems to be waiting for us wherever we go, so does environmentalism, even if we limit ourselves to looking only for what one might

call the "official" environmentalism of laws, regulations, treaties, government agencies, and nongovernmental organizations. Since the 1970s, environmental agencies and ministries have become fixtures of many national, regional, and municipal governments, while international environmental treaties have continued to grow in their coverage and complexity, even in the face of vigorous opposition. Beyond the legislative and diplomatic domains, new nongovernmental environmental organizations emerge on a regular basis, each competing with the others to inspire action, raise funds, and influence policies that will minimize or at least manage the harmful effects of human activities on the natural world and human health. In the private sector, advocates of corporate social responsibility argue that environmental and financial aims can be harmonized. In 2018, for example, the Starbucks coffee chain—the world's largest, with more than 27,000 stores—announced its Greener Stores initiative, which aimed to set "a new standard for green retail." Meanwhile, in academia, environmental studies programs established decades ago are being revitalized alongside new programs in the environmental humanities.

Regardless of our involvement with or even support of official environmentalism, environmental concerns also shape the mundane details of our everyday lives. Many of us haul our recycling to the curbside in an attempt to compensate for a culture of disposability, or simply because we are legally required to, while the most motivated among us purchase carbon offsets to mitigate the impact of our air travel on the global climate. The design of the automobiles we drive—just like those of the buses, trains, and airplanes we ride—has been shaped by environmental legislation that seeks to conserve resources and minimize pollution through fuel efficiency standards and emissions tests. When we check into hotel rooms, we are offered the opportunity to help save the environment by reusing bath towels and declining housecleaning services, while in public restrooms we encounter paperless hand dryers and low-flow toilets accompanied by self-congratulatory environmental signage. The office buildings in which we work and the coffee we drink at our desks both come with green certifications. Those of us who make our living by hunting, fishing, or farming—or who seek out such activities in our leisure time must often navigate thickets of environmental regulations before we can fire a gun, bait a hook, or plant a seed. To the extent that our identities are shaped by the material worlds we encounter on a daily basis, it seems we are all environmentalists now, whether we want to be or not.

At the same time, both the environment as a material reality and environmentalism as a social movement seem increasingly troubled. Even as some

environmental problems are solved, the severity of others continues to mount. On the positive side of the balance, populations of some of the world's most iconic endangered species, including the bald eagle and the giant panda, are on the rebound, while rivers in many places are cleaner than they have been in decades. The use of certain kinds of toxic chemicals—including the bête noire of the environmental movement of the 1960s and '70s, the pesticide DDThas been restricted to only the most urgent applications or eliminated entirely. The depletion of stratospheric ozone, which threatened to heighten human skin cancer rates by increasing the amount of ultraviolet radiation reaching Earth's surface, has been largely reversed. Take a step back, however, and such successes can seem like islands in a rising sea of environmental harms and hazards. Even as a few species recover, a few rivers grow cleaner, and a few toxic chemicals are banned, biodiversity continues to plummet globally, climate change accelerates, and microplastics, endocrine disruptors, and other new forms of life-threatening contamination of our shared surroundings continue to proliferate. As China, India, and other developing economies industrialize, moreover, some of the forms of air and water pollution that environmentalists in the developed world believed they had conquered decades ago are reemerging on a vastly larger scale.

In part because of this mixed record, environmentalism as a social movement has also come under fire. Although it is difficult to find anyone, regardless of where they stand on the political spectrum, who is opposed to a sound and healthy environment, there is little consensus over what that means or how to attain it. Surveying the state of environmentalism in 2008, the historian and activist Jenny Price described it as "a grab-bag of available causes and rhetorics old and new," including some she deemed to be of questionable value.<sup>3</sup> However inspiring environmentalism may have been in the early days of Rachel Carson and her fight against "biocides" such as DDT, Price and others have argued, the movement's apocalyptic imagination, precautionary pessimism, pervasive bureaucratization, and repeated failures to prioritize equity and justice have weakened its ability to improve urban health, mitigate climate change, or respond to a range of other environmental threats. Even environmentalists of a less critical bent sometimes sink into pessimism, arguing that although the fight to save the environment was and is a noble one, it is time to admit that the battle has been lost and to begin adjusting to a new and diminished world. Meanwhile, critics from both the left and the right have characterized environmentalism (not without justification) as an effort to shift the burdens of development or the costs of quality of life from some people

### 4 Introduction

to others. The environment may be everywhere, but the question of how we should relate to it remains deeply contested.

# QUESTIONING THE CONCEPTUAL FOUNDATIONS OF ENVIRONMENTALISM

Beneath these disputes and disillusionments lie even more fundamental doubts about the moral and conceptual foundations of environmentalism. One of these doubts concerns the very possibility and desirability of "saving the environment." Over the past several decades, an increasing number of scholars and activists have argued that, however well intentioned it may be, the impulse to "save" the environment reflects precisely the kind of hubris and sense of separation from the natural world that got us into trouble in the first place. Rather than treating the environment as if it were an object we can choose to ruin or save—that is, as something that is both separate from us and subject to our control—they argue that we should be learning to dwell responsibility within it. Since the 1990s, spurred both by the rise of right-wing and libertarian anti-environmentalism and by critiques from within, calls have grown louder to reorient the environmental movement away from saving pristine nature and toward taking responsibility for a world profoundly reshaped by human activity. Some have even argued that the extent of that reshaping is so broad that the geological and historical epoch we live in ought to be called the Anthropocene, the age of humanity.

If the idea of saving the environment has been called into question even among committed environmentalists, so has the concept of environment itself. In fact, doubts about the value of the concept are not new. Since the emergence of the modern environmental movement in the 1960s and '70s, critics have argued that the concept encourages a spurious distinction between physical environmental problems such as pollution or resource exhaustion, on one hand, and social, economic, and political concerns, on the other. In the United States, for example, the home of one of the earliest and most vigorous national environmental movements, environmentalism was seen by some advocates of the antiwar, civil rights, feminist, and labor causes as a distraction. Among other things, they argued, it tended to gloss over the very real differences in the environmental challenges faced by different communities. By the 1970s, the anarcho-socialist theorist Murray Bookchin, who had embraced the concept of environment in his 1962 book Our Synthetic Environment, was encouraging his readers to focus instead on what he called "social ecology." Compared to "environmentalism," he argued, "ecology" encouraged an approach to the

human surroundings that was less instrumental and more attuned to matters of injustice and oppression. 6 Such critiques continue to be made today, leading some activists whose concerns might seem at first glance obviously environmental to eschew the term environment entirely.

In recent decades, even the viability of the concept of environment in a scientific context has been called into question. A growing number of biologists in particular have challenged the utility of dividing the world into organisms and environments and of seeking to explain the former in terms of their adaptations to the latter. Since the 1980s especially, biologists have developed a variety of metaphors, frameworks, and research programs that reject the conventional organism/environment distinction, working under labels such as developmental systems theory, niche construction, the Gaia hypothesis, and the extended evolutionary synthesis. The evolutionary biologist Richard Lewontin, for example, has argued that "genes, organisms, and environments are in reciprocal interaction with each other in such a way that each is both cause and effect," making it impossible to draw neat lines between them that are valid under all conditions.<sup>7</sup> Even if the concept of environment need not be entirely abandoned, he and other heterodox biologists have suggested, it needs to be radically rethought. Controversial when first introduced in the 1980s, such ideas have become increasingly mainstream in recent years.

Responding to these critiques from environmental activists and scientists as well as to developments within their own disciplines, scholars in the humanities have also questioned the value of thinking environmentally. In doing so, they have both built on and transcended a longstanding tradition of critiquing specific forms of environmental thought, from the intellectual historian and philosopher Georges Canguilhem's 1952 critique of mechanistic understandings of the "living and its milieu," to the anthropologist Tim Ingold's 1993 analysis of the paradoxes of the idea of "global environment," to the environmental historian Linda Nash's 2006 account of the emergence of a "modern" concept of environment as passive, homogenous, and clearly demarcated from the body.8 At the heart of these critiques is a concern with the way the scientific concept of environment—which is also the concept of environment most often deployed in official environmentalism—seems to evacuate agency, experience, and embodiment from our understanding of life. Ingold, for example, has argued that conventional scientific understandings of the environment should be replaced with an embodied and local "mode of apprehension" that is "based on an active, perceptual engagement with components of the dwelt-in world, in the practical business of life, rather than on the detached, disinterested observation of a world apart." Like the heterodox scientists mentioned above,

these critics seek to rethink the concept of environment rather than rejecting it outright.

The fact that even many of the harshest critics of environmental thought have sought to somehow recuperate the concept reflects how deeply it has become embedded in our discourse. In recent years, however, the possibility of abandoning the concept entirely has been broached by a number of scholars. 10 If living beings are never really completely stable or self-contained, they suggest, it might be a mistake to place so much weight on a concept that divides the world into surroundings and the things they surround. "How on earth are you going to make the calculation of selfish interest and fit between 'an organism' and 'its environment,'" Bruno Latour asks, once you recognize "that the outside of any given entity (what used to be called its 'environment') is made of forces, actions, entities and ingredients that are flowing through the boundaries of the agent chosen as your departure point"?11 Similarly, asks Donna Haraway, "what happens when the best biologies of the twenty-first century cannot do their job with bounded individuals plus contexts, when organisms plus environments, or genes plus whatever they need, no longer sustain the overflowing richness of biological knowledges, if they ever did?"12 That such critiques are framed as questions suggests the difficulty of leaving the concept of environment behind; that they are being posed at all suggests that there are serious problems with the way the concept is being understood and used today.

# HISTORICIZING THE CONCEPT OF ENVIRONMENT

Even if still tentative, these challenges to a concept that was long considered self-evident raise an important set of questions for historians who are concerned with past and present relationships between humans and their material surroundings. If the concept of environment does in fact profoundly misrepresent the nature of those relationships, how did it nonetheless become so central to the way we talk, think, and act? How far back in time, distant in space, or different in culture do we have to go to find people who have no use for it, and how close might be a future in which it is no longer of interest to anyone but historians? Most broadly, over the course of the concept's history, how have we changed not merely what we think *about* the environment but also what we think an environment is? These are questions to which historians concerned with changes in the material environment and in the ways humans have related to that environment—that is, "environmental historians," as they

have been known since the 1970s—have paid surprisingly little attention. Even the enormous literature on the history of environmentalism, one of the central topics of environmental history, has barely touched on the history of the concept of environment, instead concentrating on the history of disputes over whether and how to protect an environment whose character and importance are assumed to be transparently obvious.<sup>13</sup>

This is not to say that environmental historians failed to critically examine any of their fundamental concepts. On the contrary, as the field expanded in the 1980s and '90s, they joined scholars in many other fields in the humanities and social sciences in questioning concepts they had hitherto taken for granted, from gender to technology to what was perhaps the master concept of the humanities and social sciences in the late twentieth century, "culture." <sup>14</sup> Paradoxically, however, environmental historians chose not to focus their critical attention on "environment"—the concept they had chosen for the name of their subfield—but rather on "nature," which to many of them seemed both synonymous with and more fundamental than "environment." Beginning in the early 1990s, the US environmental historian William Cronon led the field in challenging the idea that "nature," and particularly its embodiment in supposedly pristine "wilderness," was something that stood outside of human culture and could be used as a metric of human progress or a foundation of human history.<sup>15</sup> On the contrary, he argued, "nature" was a profoundly human concept with a history of its own. Over the course of the 1990s and 2000s, historians inspired by such arguments produced a number of "hybrid" environmental histories that started from the premise that nature and culture were always inextricably entangled.<sup>16</sup>

One of the curious consequences of the decision to focus on "nature" as a key concept was that "environment" almost entirely escaped examination in its own right. For those who assumed that the two terms were effectively synonymous and that environmental history could therefore be defined as the history of human relationships to nature, there was nothing surprising or concerning about this. On the contrary, by historicizing "nature," they believed that environmental historians had done the work necessary to allow their field to mature beyond its activist roots. Indeed, they argued, it gave them a critical stance from which to reevaluate the history of the environmental movement, and perhaps even to shape its future. If historical research showed that nature was always entangled with culture, then the environmental movement's focus on protecting only one form of that entanglement—that is, the kind of naturalcultural hybrid most visible in national parks and wilderness areas and other

places where evidence of human activity was at a minimum—was at best myopic and at worst actively harmful. A new and improved environmentalism, they argued, would also attempt to protect the nature that was entangled with culture in cities and suburbs, offices and factories, homes and neighborhoods, and farms, forests, mines, and other working landscapes.

In addition to providing grounds for rethinking the contemporary environmental movement, environmental historians' focus on "nature" also shaped their scholarship on the history of environmentalism. If environmentalism was about an individual's or a society's relationship to nature, broadly conceived, then its roots were both deep and broad. Not only could the environmentalism of the 1960s and '70s be seen as an extension and transformation of the nature protection and conservation movements of the late nineteenth century and early twentieth, it could also be seen as a continuation of much earlier movements for the management or preservation of forests, water, wild animals, or other aspects of the nonhuman world. Indeed, anywhere that historians were able to find evidence that people had consciously attempted to ensure that they were surrounded by conditions vital to their survival—that is, virtually everywhere in the historical record—they could claim to have found one of the "roots" or "origins" of environmentalism. 17 Moreover, by focusing on one or the other of these roots, historians could seek either to reinforce or to challenge certain aspects of present-day environmentalism according to their vision of how it could and should develop in the future.

It is only very recently that environmental historians have begun to turn their attention to the history of the concept of environment as distinct from the concept of nature. In doing so, they have begun to reveal a story that is quite different from the ones they have told about environmentalism to date. In this emerging story, environmentalism is not best understood as the modern manifestation of a concern with nature that can be found in a diverse range of cultures but rather as something far more specific—namely, the practices, values, and ideas that have coalesced among specific groups of people when they have adopted the concept of environment as a foundation for understanding the world around them. Often influenced by the history of science, this emerging body of scholarship assumes that objects of knowledge and concern such as "the environment" have not always been conceptualized in the forms we know them today but instead have emerged at particular historical moments and have continued to change over time. 18 The aim of such scholarship is not to add to the already enormous "roots and origins" literature, but rather to explain how and why groups of people in various times and places have characterized their concerns in explicitly environmental terms and taken action

accordingly. The most ambitious and wide-ranging attempt along these lines is a collaborative project by Paul Warde, Libby Robin, and Sverker Sörlin that has resulted in a series of articles, a volume of primary sources with commentaries, and the book *The Environment: A History of the Idea*, which describes the emergence of "the environment" as the focus of scientific and political concern in the second half of the twentieth century. 19

The present book builds both on the well-established body of scholarship that seeks the roots of environmentalism as commonly defined today and on this much smaller, more recent body of scholarship concerned with the historical emergence and transformation of the environment as an object of knowledge and concern. Like the former, it is motivated by a concern with today's urgent environmental problems, and it sees historical scholarship as one way of clarifying how we got here and where we are going. Like the latter, it relies on the historical record to find out what people in the past thought "environments" were and how those people protected, managed, improved, exploited, or otherwise interacted with them. However, while most of the latter body of scholarship focuses on the emergence of the notion of a singular, universal, or global environment in the decades following World War II—that is, "the environment" as we now usually conceive of it—this book begins its narrative in the late eighteenth century and includes a much wider range of variations on the concept of environment and the diverse environmentalisms that have been associated with them. The aim in doing so is to gain a better understanding of the past while also becoming more sensitive to the breadth of efforts underway today to reinvent the concept of environment for new needs and circumstances.

# MATERIALIZING A MULTIPLICITY OF ENVIRONMENTS

Perhaps the most straightforward way to discover how and why people have adopted the concept of environment is to search for moments in history when they began to speak explicitly about "environments," to identify a particular set of concerns as "environmental," to describe themselves or others as "environmentalists," or to identify a theoretical framework or political ideology as "environmentalism." This word-centered approach quickly reveals that the concept of environment has a history that long predates the modern environmental movement but that is perhaps not quite as long as one might think. Although the word *environment* and its variants make occasional appearances in English texts as early as the beginning of the eighteenth century (and can be found much earlier in French), they did not come into wide usage in anything like their modern senses until the second half of the nineteenth century. Indeed, *environment* sounded so awkward to early nineteenth-century ears that a friend of the Scottish writer Thomas Carlyle, who began using it idiosyncratically in some of his essays of the 1820s and 1830s, chided him for the appearance of what he considered to be a "positively barbarous" neologism. <sup>21</sup> By the late nineteenth century, however, many speakers of English found the term *environment* not only inoffensive but indispensable, even if the meanings they gave it and the stakes of the debates they had over it were quite different both from Carlyle's and from today's. <sup>22</sup>

Nor was this development unique to speakers of English. During roughly the same period, speakers of other European languages were adopting equivalent terms or beginning to use existing terms in similar ways, including milieu in French, Umwelt in German, and ambiente in Spanish. In other words, long before the emergence of the modern environmental movement in the midtwentieth century, environment (or its equivalent in other languages) became a useful word for many groups of speakers. Following patterns of word usage can only take us so far, however. For one thing, it is obvious that people can share a concept even if they use different words to describe it, just as they can use the same word to express different ideas. As the various schools of the history of ideas, conceptual history, and intellectual history have taught us, while the appearance of new words can signal important conceptual shifts, determining the nature and significance of those shifts requires additional work.<sup>23</sup> In the case of the concept of environment, we need to remain open to moments when people are describing or encountering their surroundings in recognizably environmental terms even if they are not using the word environment itself.

This book takes two approaches to this problem. One is to work backward from people who explicitly used the term *environment* to others who, in the view of those historical actors themselves, had previously sought to express similar ideas in other terms. In the mid-1850s, for example, the British philosopher Herbert Spencer began using *environment* to describe the conditions to which individuals adapted. Although he denied the influence, it seems very likely that he borrowed the term from Harriet Martineau, who had first used it in *The Positive Philosophy of Auguste Comte*, her 1853 translation and condensation of the voluminous work of the French philosopher. <sup>24</sup> The French term that Martineau was translating was *milieu*, which Comte had begun using in a distinctive sense in the 1830s. Comte, in turn, based his understanding of *milieu* on decades of research by French naturalists into relations between what they called "organized bodies" on one hand, and their "conditions of

existence" or "surrounding circumstances," on the other. Even though none of these earlier naturalists deployed the terms *milieu* or *environment* in the modern sense, they are an important part of the story of how those terms came into widespread use in the French and English languages.

This book also traces the concept of environment forward from people who explicitly used the term environment to others who were influenced by them. It does so by paying close attention to how the concept of environment has been embodied in practices, technologies, and social relations as well as in speech and text. In numerous cases, scientists have developed instruments and research practices on the basis of their understanding of the environment that have later been adopted by others who use them in similar ways for similar purposes even though they never deploy the term environment to describe what they are doing. Among the women who led the settlement movement in the United States at the end of the nineteenth century, for example, there were many who did not talk about their work in explicitly environmental terms but who borrowed techniques of social reform that Jane Addams and others had developed within an explicitly environmental framework. They are therefore an integral part of the history of the concept of environment. By following such tacit connections, this book offers what John Tresch has called a "materialized" intellectual history—that is, one that works from the premise that concepts become compelling and widely adopted because people put them into practice by transforming the material and social worlds around them.<sup>25</sup>

This is the very specific sense in which this book is a history of both environments and environmentalisms. That is, it is not mainly a history of how environmentalists have sought to protect the environment—a subject on which many books have been written—but rather a history of how the very idea of the environment has been materialized or put into practice in particular settings. In this sense, it is an environmental history of the concept of the environment, one that seeks to situate environmentalisms in various times and places. This may sound very similar to that staple of historical scholarship known as "contextualization," but there are some significant differences. Like contextualization, "environmentalization" helps us understand an otherwise isolated historical entity, event, or concept as part of a larger world or a longer or more complex narrative. Whereas the notion of context calls our attention to representation and interpretation, however, the notion of environment calls our attention to the material conditions that are essential for any entity, including a concept, to emerge and to persist. The context of environmental medicine

in the British Empire consists of social, economic, political, and cultural factors; its environment is all of that, as well as climates, diseases, landscapes, technologies, and bodies—a list that future historians will likely find ways of extending or modifying, since just as there are many ways of conceptualizing the environment, there are many ways of environmentalizing the past.

If concepts come to matter only when they are materialized in particular environments, then what we mean when we use the word environment depends on the situation in which we find ourselves. That does not imply, however, that environment can mean anything we want it to. Even though there is an almost infinite diversity of ways to think and act environmentally, that diversity is constrained within certain limits. Language is flexible and changeable, but it is also the product of collectives of speakers who generally seek to remain comprehensible to one another. As a consequence, there are some patterns that hold true across the history of environmental thought, including the idea of a mutually constitutive relation between an entity and that which surrounds it—that is, a relationship in which each party not only influences the other but also in some fundamental way determines what the other is. In marked contrast to the term *nature*, which is often used to refer to the intrinsic character of a particular entity ("it is in its nature") or to aspects of the world that are fixed and unchangeable ("the order of nature")—that is, to things that are independent of any relation to external entities or forces—environment has almost always been used in this relational sense. This was expressed with particular clarity by the political scientist Lynton Caldwell, one of the architects of the first explicitly environmental legislation in the United States, who noted in 1963 that the "concept of environment assumes not only 'surrounding things' but something that is surrounded."26 Without that fundamental relationality, the concept of environment loses much of its distinctiveness.

If the essentially relational nature of the concept of environment means that we cannot know what an environment is without knowing what it surrounds, it also means that as our understanding of the environment shifts, our understanding of what it means to be an entity surrounded by that particular kind of environment shifts along with it. We can see this necessary relationship between "surrounding things" and "something that is surrounded," in Caldwell's terms, at the very beginning of the history of the concept of environment, which required the invention of a new object of scientific inquiry: the "organism," which was defined as a combination of specialized parts ("organs") that worked together to allow a living being to survive and reproduce itself under a certain set of external conditions (its "environment"). We can also see this relationship in attempts emerging during roughly the same period to

reconceive human populations as "a multiplicity of individuals who are and fundamentally and essentially only exist biologically bound to the materiality within which they live," as Michel Foucault wrote in describing new modes of governing subjects and citizens that emerged in the eighteenth century even before the concept of environment (or *milieu*) had been clearly articulated.<sup>27</sup> More broadly, each attempt to adapt the concept of environment to new circumstances and aims has been accompanied by changes in the understanding of the entities that are surrounded, whether those entities are imagined to be organisms, species, communities, civilizations, or the biosphere as a whole. The history of the concept of environment and the diverse environmentalisms associated with it is therefore also a history of the emergence of these kinds of surrounded entities, and of how various groups of people have imagined their ideal relationship to their surroundings.

### THE SCOPE AND STRUCTURE OF THIS BOOK

Framed in such a broad way, this is a topic that could fill multiple books. Indeed, an account of all ways of conceiving of and relating to the environment would probably be as impossible to write as it would be to read. Fortunately, such a comprehensive account is not essential to conveying this book's core arguments—namely, that there have been many ways of being environmental since the emergence of the concept sometime between the late eighteenth century and the mid-nineteenth century; that particular ways of being environmental have emerged to serve particular aims under particular circumstances; that while none of these ways are either illegitimate or perfect, some of them are no longer very well suited to present-day aims and circumstances; and that we will as a consequence almost certainly need new ways of conceiving of and relating to our environments in the future, for which the past may serve as guide. For these purposes, a more modest selection of representative episodes suffices. There are links between each of the episodes, but this book does not present a narrative of smooth and continual progress, nor does it describe neat shifts from one paradigm to the next. Rather, it describes situated and partial adaptations and appropriations of techniques, practices, and ideas from one episode to the next.

A number of aims and constraints shaped my selection of episodes. One aim was to demonstrate that, far from being a universal concept with equivalents in every human culture and language and in all times and places, the concept of environment is the product of a very specific and—from a historian's perspective, at least—relatively recent history. I therefore decided that