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## Preface

This book seeks to take a first step in filling a hole in the current literature on the history of American environmentalism since World War II. The biologist Barry Commoner is frequently invoked in works of environmental history, but little of substance has firmly situated his larger role in that history. During the 1970s, Commoner became famous for his Four Laws of Ecology, and many will recall his presidential campaign of 1980, but rarely is the context of Commoner's place in the history of American environmentalism properly appreciated. His influence on postwar science, environmentalism, and politics runs much deeper and is far more complicated than the literature suggests. This book means to engage with Commoner's social and environmental activism. In addition to being one of the most important environmental leaders of the postwar period, Commoner was a very able biologist who did groundbreaking work on the tobacco mosaic virus, free radicals, and genetic theory. While *Barry Commoner and the Science of Survival* concentrates on Commoner's use of science as a political tool, it does less justice to his scientific career outside the public arena; that important story remains to be written.

History, though, is an exercise in collaboration. We organize our thoughts and research in tandem with the intellectual generosity of others. In this way, I am indebted to more people than I could ever hope to acknowledge here. I must begin, however, with the protagonist of this story. In my first meeting with Professor Commoner, I asked a series of general and awkward questions that he very patiently answered. At the end of that meeting, he gave me a tour of the Center for the Biology of Natural Systems, then stopped me and said: "You're Michael; I'm Barry." I took it as a sign of acceptance. He also duly informed me—without a shred of self-consciousness—that I was tackling an excellent and important topic. He

was right. I hope that the following pages do justice to his career in the public spotlight, the trust he placed in me, and the amount of time he made available for me.

*Barry Commoner and the Science of Survival* began as a doctoral dissertation at Washington State University, where I found myself deeply interested in the relationships between science, environmentalism, and social justice. In a seminar, LeRoy Ashby encouraged me to pursue these questions in a research paper that turned out to be the substance of chapter 4. My instinct is that I have broken—at some point—every one of his “rules” for writing in this book—but, I hope, not the spirit with which they were delivered. The dissertation benefited from the careful and thoughtful comments provided by Ron Doel and Paul Hirt. I especially want to acknowledge Ron’s kindness and encouragement; while tirelessly offering comment and answering questions, he never wavered in his enthusiasm for the questions I was asking. He and Paul are my friends. Paul’s supervision of my graduate work and dissertation struck an excellent balance between teacher and one who strongly believed in my intellectual freedom and that I should chart my own path. He has seen more drafts of these chapters than he or I would likely care to count, and if his good direction is reflected in the pages that follow, then this book is a much better piece of work than I ever deserved to write.

This study has also benefited from the attention and care that Bob Brulle, Ben Cohen, Jeff Crane, Amy Crumpton, Andrew Duffin, John Hausdoerffer, Maril Hazlett, Linda Lear, Neil Maher, Kevin Marsh, and Laurie Mercier offered in insightful readings of various sections and chapters. In addition, for suggestions, conversations, and directions, I am grateful to Kevin Armitage, Sue Armitage, Mary Braun, Laurie Carlson, Arthur Daemmrich, Matthew Eisler, Hilary Elmendorf, Sara Ewert, Michael Fellman, Dale Goble, Hugh Gorman, Denis Hayes, Sam Hays, Katie Johnson, Steve Kale, Peter Kuznick, Christophe Lécuyer, Jack Little, Alan Loeb, Tim Luke, Gregg Mitman, Cyrus Mody, Tammy Nemeth, Sheldon Novick, Bill Robbins, Philip Scranton, Thomas Seiler, Steve Shay, Adam Sowards, Jeffrey Stine, Heather Streets, Noël Sturgeon, Paul Sutter, Jay Taylor, Patricia Thorsten, Jessica Wang, Sylvia Washington, Charlie Weiner, Laurie Whitcomb, and Tony Zaragoza. What light this work does offer is amplified by the generosity of these colleagues and friends. I, of course, remain solely responsible for its enduring shortcomings.

At Washington State University, I was the recipient of the College of Liberal Arts' Boeing Graduate Fellowship in Environmental Studies and the Department of History's Claudius O. and Mary W. Johnson Fellowship. Both the college and the department were especially energetic in encouraging my studies and research. Similarly, my new colleagues at McMaster University have been most supportive and an Arts Research Board grant helped to defer some of the costs of the photographs. I am also grateful to archivists across the country for their help in locating documents: Kenn Thomas at the Western Historical Manuscript Collection at the University of Missouri-St. Louis; Patricia E. White at the Special Collections and University Archives at Stanford University; Lucia Munch at the AAAS Archives; and especially the genial staff of the Manuscript Reading Room at the Library of Congress. I should also make special reference here to Sharon Peyser of the Center for the Biology of Natural Systems, who assisted in coordinating my interviews with Professor Commoner and helped me to get access to a number of papers in their files. At MIT Press, Clay Morgan and Bob Gottlieb have been instrumental (and patient) in shepherding this work to its completion. I am especially grateful to three anonymous readers, whose comments were intellectually invigorating.

Finally, I have enjoyed the unfailing love of family, near and extended. My parents have been a constant source of support—moral and intellectual; my grandmother, a source of inspiration; and my brother and sister, companions. My children, Joshua and Jordan, served as wonderful distractions from work as well as poignant reminders of its larger significance. This work begins and ends with Janice: friend, partner, beloved.



In our progress-minded society, anyone who presumes to explain a serious problem is expected to offer to solve it as well. But none of us—singly or sitting in committee—can possibly blueprint a specific “plan” for resolving the environmental crisis. To pretend otherwise is only to evade the real meaning of the environmental crisis: that the world is being carried to the brink of ecological disaster not by a singular fault, which some clever scheme can correct, but by the phalanx of powerful economic, political, and social forces that constitute the march of history. Anyone who proposes to cure the environmental crisis undertakes thereby to change the course of history.

But this is a competence reserved to history itself, for sweeping social change can be designed only in the workshop of rational, informed, collective social action. That we must act now is clear. The question which we face is how.

—Barry Commoner, *The Closing Circle*, 300



# Introduction

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## The New Apparatus

You have to describe the country in terms of what you passionately hope it will become, as well as in terms of what you know it to be now. You have to be loyal to a dream country rather than to the one to which you wake up every morning. Unless such loyalty exists, the ideal has no chance of becoming actual.

—Richard Rorty

On 2 February 1970 *TIME* magazine incorporated a new “Environment” section. The editorial staff chose for that issue’s cover a haunting acrylic painting by Mati Klarwein of Barry Commoner, its appointed leader of “the emerging science of survival.” Commoner was set in front of a landscape half of which appeared idyllic and the other half apocalyptic, presumably suggesting the environmental choices facing humankind. The urgency of those choices was implicit. The decision to put the biologist from Washington University in St. Louis on the cover stemmed less from Commoner’s celebrity than from his relative ubiquity. As *TIME* editors hunted for their first cover story relating to the environment, they discovered that Commoner had lectured widely on a variety of environmental topics and had gained notoriety in sounding the alarm on environmental problems ranging from nuclear fallout and air pollution to water contamination and toxic chemicals in the city, on the farm, and in the home. In choosing Commoner, *TIME* acknowledged both the extent and the complexity of that crisis as well as affirming Commoner’s role as a key voice of dissent in the larger environmental discourse.

After World War II, the American popular imagination recognized the existence of an environmental crisis in the United States. Amid a period of high Cold War tension, Americans welcomed the “Age of Ecology,” the rapid expansion of legislation relating to environmental protection, and