

The Chimney of the World: A History of Smoke Pollution in Victorian and Edwardian Manchester. By *Stephen Mosley*. Cambridge, U.K.: White Horse Press, 2001. x + 271 pp. Index, notes, maps, bibliography, illustrations, tables. Cloth, \$65.00/£35. ISBN: 1-874-26749-9.

Reviewed by Matthew Osborn

The great strength of Stephen Mosley's *The Chimney of the World* is its melding of environmental and cultural history, which lends an added dimension to his rich and original study. Neither a narrowly focused chronicle of urban pollution nor an interpretive cultural history, the book presents a complex, wide-ranging assessment of air pollution in nineteenth-century Manchester (the spiritual home of air pollution, according to a quote from John Ruskin that appears on page one). Mosley's panoramic approach illuminates the period, the place, and the subject and offers a template for understanding more about air pollution in any context.

As an environmental historian, Mosley does an admirable job of showing that "society-nature interactions are indeed a two-way street" (p. 7), an important contribution within the relatively recent field of European environmental history. Though heavily influenced by urban pollution studies, this text moves beyond their usual themes, which tend to emphasize the despoliation by humans of their surroundings. By paying close attention to how pollution reverberates back to the human population, leading to responses that further change the environment and people's relationship to it, Mosley makes this dialectic explicit. His thesis is largely derived from Joel Tarr and Christine Rosen's agenda for the study of urban environmental history. However, as he makes clear, the two-way interaction was not limited to nature and society, but was carried out as a dialectic between the anthropogenic environment and the culture of industrial Manchester. In this, Mosley acknowledges his other main influence: postmodern critical theory and the manner in which our understanding of the natural world is culturally constructed: "The ecological, economic, technological, social and cultural dimensions of urban air pollution are woven together here to produce a synthetic form of environmental history that provides a wide scope for inquiry and explanation" (p. 9).

While his thesis may seem ambitious, Mosley's focus on Manchester's smoke pollution allows him to ground his study in reality. The book is divided into three parts: The first ("The Nature of Smoke") details the effects of smoke pollution on air quality, human health, and the natural and built environment. The second part ("Stories About Smoke") explores the social construction of Mancunians' understanding of this smoky world and the impact of the stories they told about smoke on their culture and environment. Part Three ("The Search for Solutions") addresses the political responses to atmospheric pollution and surveys the overly cautious strategies that were devised to deal with the problem. Through this tripartite division, the author is able to incorporate a number of disciplinary perspectives within a coherent framework.

The multidisciplinary nature of this study is also apparent within each of the three sections, as they cover not only the natural effects of smoke pollution but also the prevailing combustion technologies, the changing perspectives of both polluters and their victims, the human health effects of pollution, and the evolution of scientific understanding of acidity, atmospheric dynamics, disease, chemistry, and urban geography. By merging our current, scientifically based views of these problems (often themselves incomplete) with the state of knowledge that existed in the nineteenth century, *The Chimney of the World* reveals the limits of these earlier views while acknowledging their evolving nature.

If it were necessary to find one book that addresses smoke pollution in the new industrial urban centers of the nineteenth century, this is the one that should be selected from the shelves. While there may be studies that go into greater detail, a more comprehensive study of smoke pollution will be hard to find. In addition, its thorough account of the development of pollution science and government regulation will aid businesses and regulators in addressing current issues associated with atmospheric pollution today. With oxides of nitrogen from cars gaining ascendancy over oxides of sulfur as causes of acid deposition, with levels of asthma rising among urban populations, and with carbon-dioxide emissions contributing to global warming, the lessons drawn from this book can enlighten our future direction and deepen our knowledge of the past.

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