# Scientists and the Establishment of a Mass Environmental Awareness

(1950-1990)

edited by JINGYUAN WU

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Jingyuan Wu

From the 1950s to the 1990s it was a crucial era; the world witnessed a significant rise in environmental consciousness and the foundations of today's environmental discourse were laid. Focus on this period, the primary aim of this book is to analyze the process of creating mass awareness of environmental problems, during which the scientists, policymakers, cultural institutions, environmental movements, and the broader world of work contributed to the burgeoning awareness.

It seeks to answer pivotal questions regarding the extent to which scientific objectivity has been influenced by relations with political and economic decision-makers, how scientific ideas on the environmental crisis and organizations reached the public, and whether mass awareness of the environmental crisis is based on a vulgarization of scientific ideas influenced by political debate and mass culture. By discussing these questions with historical archives, the book aims to provide a comprehensive understanding of how scientific knowledge has been intertwined with political and economic forces and how this interaction has shaped public perception and policy.

The book adopts the philosophy of "history from between", emphasizing the importance of examining the spaces between different regions and cultures to understand how environmental awareness is constructed. As Jenco and Chappell (2021) indicates, this approach highlights several key themes, starting with contextual understanding and co-production. This book emphasizes the contextual understanding of environmental issues, where scien-

tific knowledge, indigenous knowledge, and political actions interact and shape each other in complex ways. Under this notion, environmental awareness is deeply intertwined with how humans symbolically construct their worlds. By exploring the global history of environmental awareness, scholars can uncover how different societies have imagined and stabilized their relationships with the environment. This includes examining how scientific concepts, political actions, and cultural symbols have shaped environmental policies and public perceptions. The symbolic construction of worlds highlights the role of narrative and imagery in forming environmental consciousness, showing how scientific and political discourses are embedded in cultural contexts. Understanding this context-dependent nature of environmental awareness allows us to appreciate the multifaceted nature of environmental awareness as it developed in different contexts and what are the key generating mechanisms.

The second key theme is how different actors interact during the "world-making" process (Bell 2013), during which the awareness of the environment turns into influencing the reality of it. Scientists and politicians are two important actors. Scientists play a crucial role in generating and disseminating knowledge about environmental issues, providing the empirical basis for understanding environmental changes and their impacts. Their engagement with environmental politics helps translate scientific knowledge into actionable policies and practices. On the other hand, political dynamics significantly shape the development and implementation of these policies. This book shows the importance of intellectual and material contributions from various regions in shaping global environmental awareness. This approach acknowledges that the outcomes of environmental interactions are not mere reactions but are co-produced through the engagement of local and global actors. By focusing on the role of scientists and politics, historians can trace how scientific knowledge and political decisions have mutually influenced each other, leading to the development of environmental policies and practices. This co-production framework allows us to see how envi-

ronmental knowledge is continually reshaped through interactions between different actors and contexts.

It is crucial to note that the interactions between scientific knowledge and political dynamics are characterized by distributed agency, with actors contributing to the development of environmental awareness within a framework of asymmetrical power relations. Understanding these interactions helps reveal how different actors, even under conditions of unequal power, exercise agency and contribute to the local discourse on environmental issues. This distributed agency is critical for grasping the collaborative and often contested processes that have shaped environmental awareness. The diffusion of environmental awareness is never a one-way process. The book reveals the dynamic and interactive nature of these processes, moving beyond simplistic narratives of knowledge transfer to consider the complex exchanges and adaptations that characterize the global history of environmental awareness.

The book brings together contributions from scholars in Asia and Europe, providing a comparative perspective on the roles of scientists and politics in different regions.

Chapter Scientists and The Environment: Notes for A Study in Historical Perspective by Federico Paolini analyzes the role of scientists in fostering environmental awareness in Italy, highlighting the challenges and tensions at the intersection of science, politics, and environmentalism.

Chapter Time Lags of Environmental Issues: A Pollution History of Connections across Japan, China, and Southeast Asia by Jingyuan Wu, identifies three types of time lags in the political recognition of environmental issues across Japan, China, and Southeast Asia, demonstrating the transboundary role of scientists and experts in advocating for local communities and fostering international cooperation.

Chapter Bridging Science and Local Knowledge/Perception: A Case Study of Manila Bay Coastal Provinces (Philippines) after the 1988 Red Tide Episode by Ma. Luisa De Leon-Bolinao, narrates the events of

the first red tide episode in Manila Bay, discussing the reactions of fisherfolk, government, and scientists, and analyzing how they bridged the communication gap during the crisis.

Chapter *The Damned Fate of the Bontok and Kalinga Ethnic Groups:* A History of their Resistance Against the Chico River Hydroelectric Dam Project, 1973-1986 by Ma. Florina Orillos-Juan, focuses on the opposition to the Chico River Hydroelectric Dam project in the Philippines, examining the environmental and social costs and the resistance from local communities.

Chapter Pop culture and circulation of ideas: counterculture, environmentalism, anti-science, healthism in the musical narratives of The Kinks and Alberto Camerini (1968-1978) by Federico Paolini is an attempt to analyse two musical narratives that show how pop culture caught the debate on environmental issues, then spread it to a wide audience cleared from the complexity of scientific issues which have been replaced by subjective and emotional perceptions.

With these historical narratives on how scientific knowledge, political dynamics and sociocultural factors have interacted to shape environmental policies and public perceptions in different regions, the book highlights the co-production of environmental knowledge, the distributed agency of various actors, and the complex interactions that have shaped our understanding of the environment. Besides emphasizing the global nature of environmental issues, by providing a comparative perspective between Europe and Asia, the book also enriches the discourse on sustainability and environmental justice.

#### References

Bell D. (2013), Making and Taking Worlds, in S. Moyn, A. Sartori (Eds), Global Intellectual History, Columbia University Press, New York, pp. 254-280.

Jenco L.K., Chappell J. (2021), Introduction: History from Between and The Global Circulations of The Past in Asia and Europe, 1600-1950, «The Historical Journal», vol. 64, n. 1, pp. 1-16.