

## Science as Culture: Transgressing Disciplinary Boundaries 1850–2050

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In response to the environmental transformation that is so much a hallmark of our times, global environmental change scientists and environmental humanities scholars argue that new approaches to “environmental expertise” and to “the environment” are necessary. These new efforts to address and ameliorate environmental problems will involve integrating knowledge across disciplines long understood to operate in separate domains: sciences and humanities.

While sustainability and global change research has employed integrated approaches that engage disciplines within the sciences—and those between the sciences and social sciences since the mid-1980s—during the same period, the humanities have played a far more marginal role. In order to forge more effective responses to environmental challenges, a number of international research initiatives now aim to include the humanities in integrative programs (including Future Earth and IHOPE). Environmental scientists now see the humanities as part of possible “solutions.” The humanities are responding to environmental concerns with developments in the rapidly expanding field of the environmental humanities, which aims to foster dialogue beyond the humanities to the realms of science and policy. Despite this “rapprochement,” the exact ways in which new forms of collaboration might evolve is unclear. Orthodoxies and conventions need to be challenged in both fields, and there are few examples to show the way forward.

This project aims to contribute to this fresh turn towards interdisciplinary research by examining key thinkers and practitioners whose work has: i) forged unlikely connections between things (knowledge systems, objects of study, modes of communication, environmental problems); and ii) aimed to make a difference in the world. To explore these issues, the project is structured around key figures as “case studies” including: Henry David Thoreau, Rachel Carson, Judith Wright and Oodgeroo Noonuncal, Michel Serres, Wangari Maathai, and Will Steffen. These figures form the basis for the project’s main aims: 1) to ask how innovative thinkers move beyond the comfort of their own training to synthesize knowledge across disciplinary boundaries or seemingly disparate fields of enquiry, and to communicate with broad audiences in order to effect change; 2) to examine the function of institutional contexts in enabling (or not) unorthodox interdisciplinary approaches to environmental issues; and 3) to ask how the heritage of creative interdisciplinary historical figures might apply or be extended and adapted to our current circumstances of global environmental change.