## **Environmental Humanities: Why Should Biologists Interested in the Environment Take** the Humanities Seriously?

SVERKER SÖRLIN

What do the humanities have to do with the environment? As they are commonly understood, environmental problems are issues that manifest themselves primarily in the environment itself. Natural scientists research these problems and suggest solutions, aided by technology, economics, and policy; it was bioscientists who defined the modern usage of the concept of the environment after World War II. Ecologist William Vogt famously used it in his 1948 volume The Road to Survival: "We live in one world in an ecological—an environmental—sense." He and others at the time thought of the environment as a composite of issues that had been in the making for some timemost prominently, population growth, which had been much discussed since the World Population Conference in Geneva in 1927, but also soil erosion, desertification (observed by Paul Sears in his famous 1935 book, Deserts on the March), pollution, food, poverty, and starvation.

In the public's mind, environmentalism is still connected with the 1960s, from Rachel Carson's Silent Spring (1962) to the foundation of the US Environmental Protection Agency and Earth Day in 1970, but in reality, its start was earlier, and humanist thinkers were deeply part of the first phase of the environmental revolution. In France, a cohort of eminent historians started the journal Annales d'histoire économique et sociale in 1929, which became an outlet for a take on history as an interaction of humans with physical geographies. Aldo Leopold was as much a philosopher as an ecologist when he developed his concept of a land ethic in A Sand County Almanac (1949). When the important Princeton conference on "The Earth as transformed by human action" took place in 1955, Lewis Mumford, the planner and urban historian, was a notable speaker.

However, the humanities presence faded quickly, and for half a century, there were few humanities scholars at the top levels of environmental science planning and as policy advisers. They themselves commonly accepted the outsider role.

Now we seem to be in for a change. The background is the current inadequacy of the established science, policy, and economics approaches. In fact, despite all our efforts, most indicators of our future point in the wrong direction. As some of us, members of a team led by ecologist Johan Rockström, discussed in an article in Nature (2009, doi:10.1038/461472a), humanity is rapidly transgressing a set of planetary boundaries, including atmospheric carbon dioxide, biodiversity loss, and ocean acidity. We face both local and global coupled multiscalar crises of geopolitical instability, resource scarcity, economic collapse.

Our belief that science alone could deliver us from the planetary quagmire is long dead. For some time, hopes were high for economics and incentive-driven new public management solutions. However, after the 20 years since the Rio Conference in 1992 of focusing policies on what Maarten A. Hajer in The Politics of Ecological Discourse (1995) termed ecological modernization, including efforts for green and clean growth, ecoefficiency, decoupling, and the ever more sophisticated management of landscapes and species, the world seems to have come to a point where we must again determine pathways to sustainability.

It seems this time that our hopes are tied to the humanities. In February 2012, the Responses to Environmental and Societal Challenges for Our Unstable Earth (RESCUE) initiative, commissioned by the European Science Foundation and Europe's intergovernmental Cooperation in Science and Technology program, presented its synthesis report. It gives a high profile to the humanities, arguing that in a world where cultural values, political and religious ideas, and deep-seated human behaviors still rule the way people lead their lives, produce, and consume, the idea of environmentally relevant knowledge must change. We cannot dream of sustainability unless we start to pay more attention to the human agents of the planetary pressure that environmental experts are masters at measuring but that they seem unable to prevent.

Some of the shift toward the human sciences has to do with the fundamental shift in understanding that is represented by the Anthropocene concept, coined by Crutzen and Stoermer in 2000 (Global Change Newsletter 41: 17-18). If humanity is the chief cause of the ominous change, it must surely be inevitable that research and policy will be focused on human societies and their basic functions. After half a century of putting nature first, it may be time to put humans first. Some members of the RESCUE team have moved further and are publishing a lead article titled "Reconceptualizing the 'Anthropos' in the Anthropocene" for a special issue of Environment and Science Policy due out later this year.

Other initiatives point in the same direction. Considerable energies are going into the emerging concept of environmental humanities. This is a broad multidisciplinary approach that signals a new willingness in the humanities to forgo the primary focus on disciplines (as in, e.g., environmental philosophy, environmental history) for a common effort in which the relevance of human action is on par with the environmental aspect. Programs for the environmental humanities have already started to emerge in universities in Europe, Australia, and the United States, including at Stanford. The Consortium of Humanities Centers and Institutes (CHCI), an assembly of more than 70 humanities centers worldwide. has its own Initiative Humanities for the Environment, which "serves as a network and resource for centers to develop (or extend) programming, research, and dialogue related to contemporary environmental challenges" (http://initiatives.chcinetwork. org/environment). The Transatlantic Environmental Research Network in Environmental Humanities links several universities in the United States and Canada with primarily German counterparts, including the recently set up Rachel Carson Center in Munich. Princeton's Institute for Advanced Study has devoted 2013 and 2014 to the environmental humanities as their chosen thematic field.

A new journal, Environmental Humanities, will be launched this November; it is based at the University of New South Wales, where there is also an interdisciplinary environmental humanities program. Several scholarly environmental humanities networks are active in Scandinavia, and some of their work will appear a new volume, Defining the Environmental Humanities, derived from a recent conference in Sweden. After decades of very little interest in funding large-scale environmental work in the humanities, funders have started to invite experts on human

values, ideas, history, thinking, religion, and communication to bring their knowledge to bear on critical global issues. Norway has started the Cultural Conditions Underlying Social Change program. Among its highest-priority areas of interest are the environment and climate change.

Some of the most remarkable work on the environment in recent years has already been carried out by humanities scholars. Lawrence Buell at Harvard sparked off the ecocritical movement in literary studies from the 1990s with a string of books, including his Writing for an Endangered World (2001). His colleague Ursula K. Heise at Stanford articulated the emerging idea of a global humanity with a planetary conscience in her book Sense of *Place and Sense of Planet* (2008). If this is an emerging idea, the outlook in a few generations may in fact be brighter than we think.

In France, superstar sociologistphilosopher Bruno Latour is currently reconfiguring his country's leading policy school, the Sciences Po, putting his ideas of a major environmental turn of the planetary enterprise at center stage. At the Science Policy Research department at the University of Sussex, Andy Stirling has invited us to consider what he calls directionality as we conceive research policy for economic growth in order to achieve real progress, not just more of the same destructive kind of growth. Literary scholar Rob Nixon at the University of Wisconsin-Madison, argues that a "slow violence" (part of the title of his 2011 book, Slow Violence and the Environmentalism of the Poor) plagues the poorest people on Earth, who shoulder a disproportionate share of the burden when the rich outsource their ecological footprint—dumping waste, axing forests, or relocating dangerous workplaces.

Environmentally aware humanities scholars have already begun to challenge established truths. Although ecologists and economists have put considerable hope over the last two decades into the idea that we may be able to defend ecosystem services by translating them into monetary terms, several humanities scholars (in alliance with many skeptical scientists) have presented fundamental criticism of this approach. Uncritically applying the indiscriminately universalizing tool of monetized services risks doing more harm than good to the environment. In particular, it runs the risk of marginalizing social groups—and, therefore, civic values—as they try to articulate value-based agendas for defending nature and urban space.

The arrival of humanists to the environmental enterprise should be welcomed. It will mean new opportunities for bioscientists to collaborate with those in the humanities and vice versa, as is already the case in the deeply transnational International Geosphere-Biosphere Programme's Integrated History and Future of People on Earth (IHOPE). It will mean deeper reflexivity and an increased competition of ideas and perspectives. It will also bring a sense of realism back to our work for the environment and sustainability. When even humanists have come to the point at which they consider the environment (almost) as important as people, there may-malgré tout-be reason for hope.

Sverker Sörlin (sorlin@kth.se) is a professor of environmental history in the Division of History of Science, Technology and Environment, at the Royal Institute of Technology (KTH), and is affiliated with the Stockholm Resilience Centre, both in Stockholm, Sweden. He is responsible for setting up the KTH Environmental Humanities Laboratory, which will be in full operation as of 2013. He is the editor, with Libby Robin and Paul Warde, of The Future of Nature: Documents of Global Change (forthcoming from Yale University Press).

doi:10.1525/bio.2012.62.9.2

Reproduced with permission of the copyright owner. Further reproduction prohibited without permissio	n.