

Background Paper

The Emergence of the Environmental Humanities

May 2013

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The contents of this background paper
are the responsibility of the authors.

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1. The Emergence of the Environmental Humanities

1.1 Summary

In 2012 the Mistra Board established a Working Group on the Environmental Humanities in order to decide whether or not the Foundation should invest in this field. This working group was chaired by Professor David E. Nye (University of Southern Denmark) and included Professor Linda Rugg (University of California, Berkeley), Professor James Fleming (Colby College), and Dr. Robert Emmett, (Director of Academic Programs at the Rachel Carson Center, University of Munich). This working group met for two days in January 2013, and during that time held a seminar attended by researchers from Swedish universities. Subsequent discussions on-line and by telephone enabled preparation of this report, which was finalized at a working group meeting May 12–14 in Stockholm.

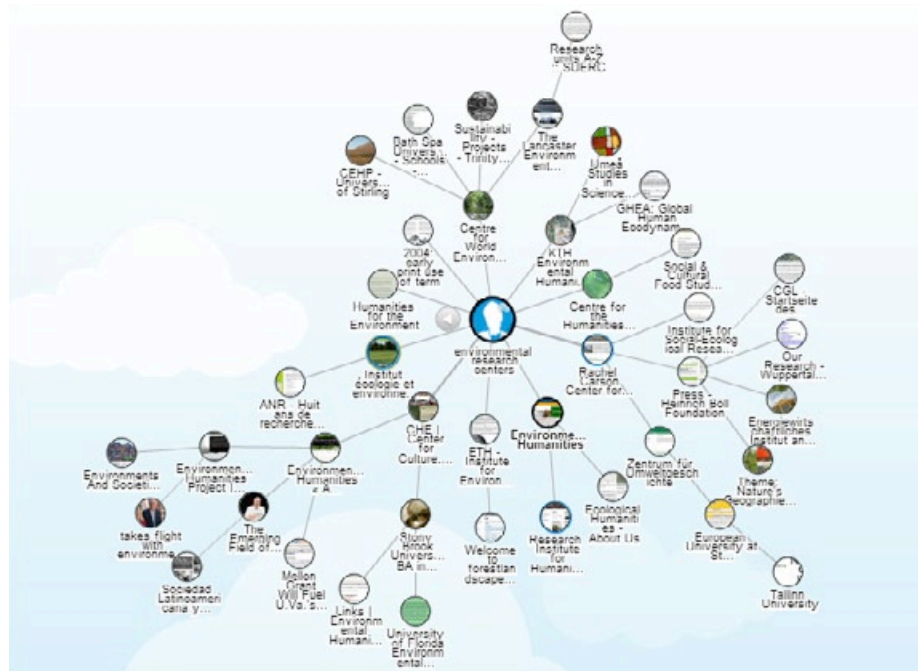
Swedish research in the Environmental Humanities is of high quality. There are prominent senior scholars in key positions to foster its further development as well as many young scholars eager to work in this area. There are also many useful international connections to build upon with leading centers in Australia, Canada, Germany, and the United States. In a global perspective, Sweden is an early mover in Environmental Humanities research and is poised to have a significant impact internationally. Strategic funding could support high-impact individual researchers and focused group projects, link researchers in Sweden to one another and to scholars around the world, making Sweden a leader in the global effort to solve environmental problems. The investment in people and programs must be sustained, however, if the effort is to be robustly interdisciplinary, fully intergenerational, and at the scale needed to move Sweden into the ranks of elite international research environments.

The Environmental Humanities have broad implications for other fields. They provide historical perspectives on the natural and social sciences, assist in the interpretation of scientific results, clarify societal values, address ethical problems that arise with new technologies, facilitate implementation of public programs, break down barriers between the humanities and the sciences (thereby enhancing the interdisciplinarity of Swedish universities), and foster the values needed to build a sustainable society and the new habits needed for environmental citizenship. This field therefore appears to fit within Mistra's guidelines defining areas eligible for its support. Moreover, Mistra's investment in this field should generate a strong return in environmental understanding that can enhance its overall goals.

1.2 Mistra and the Planning Process

The designated purpose of The Foundation for Strategic and Environmental Research (Mistra) is to support research that has a strategic value in solving environmental problems and that contributes to the creation of a sustainable socie-

FIGURE 1. Worldwide Emergence of Environmental Humanities Research



ty. Mistra fosters and supports quality research environments. Many of these are interdisciplinary, and are intended to improve Sweden’s competitiveness. In practical terms, the research supported can result in new companies, in new products, or in new academic, governmental, or cultural initiatives and organizations. In 2012 the Mistra Board decided to examine whether or not the Environmental Humanities in Sweden fit these criteria, with a final report deadline of 16 May 2013.

1.3 What are the Environmental Humanities?

During the last decade a new field has emerged that increasingly is referred to as the Environmental Humanities. This report will locate that development historically, intellectually, and geographically, and will assess to what degree and how the field might be encouraged and supported in Sweden.

Environmental Humanities research centers often originated either in literature departments, because of the ecocritical movement in English Literature and American Studies, or in history departments, where the field of environmental history emerged after c. 1980. Other contributors to this field have come from inherently interdisciplinary fields such as geography, the digital humanities, gender studies, anthropology, and the history of technology.¹ The latter has a sizeable group of younger scholars who defined their field as “envirotech.” Other fertile ground for Environmental Humanities has emerged at interdisciplinary centers that combine natural and social sciences with humanities, or at humanities centers that encourage research and discussion across disciplines.

The term “environment” gained currency in the nineteenth century² and emerged as a focus of global concern only in recent decades. The Environmental

¹ For example, the MIT MacArthur Workshop on Humanistic Studies of the Environment (1991–1995) sought to transcend the dichotomous nomenclature of nature vs. culture by locating ecological problems in the behavior of human beings, including institutions, beliefs and practices. It defined practices in the “Applied Humanities” as applied to environmental topics and addressed issues in a humanistically-informed set of “New Environmentalisms” through a set of more tractable critical oppositions

² Historically speaking, the Environmental Humanities can be traced to the nineteenth century, particularly in the fields of history, literature and philosophy. For example, in the United States two seminal works were published at that time: Henry David Thoreau’s *Walden* (1854) and George Perkins Marsh’s *Man and Nature* (1864) — both still in print and often cited today. Many followed in Thoreau’s wake, notably John Burroughs, John Muir, Aldo Leopold, Edward Abbey, Annie Dillard, and Terry Tempest Williams. Marsh influenced some of these authors as well as science writers who verged on the philosophical and literary such as Rachel Carson, and journalists with environmental concerns.

Humanities address lacunae in the humanities, which seldom address science and technology in detail, and lacunae in environmental studies, where analysis typically emphasizes science and social science. Several fields that have contributed much to the Environmental Humanities have already begun to bridge this divide, notably cultural geography, anthropology, and the history of technology.

As the humanities became democratized in the movement toward mass education, its scholars have gradually become more engaged environmental issues and research. This was due in part to scholarly interest and in part to a quest for social relevance, but in almost all cases it was also a response to the growing awareness of environmental problems. Scattered, individual efforts between c. 1960 and 1980 led to the formation of scholarly associations and journals. Financial support for these activities, haphazard before c. 1990, has become more systematic. For example, in recent years major funding for the Environmental Humanities has been given by the Mellon Foundation to UCLA, Berkeley, the University of Virginia, and the University of Sydney.

The present moment is one of transition as well as growth. A generation of scholars who laid the foundations for the Environmental Humanities are nearing retirement or have already retired. They leave behind a thriving intellectual field, including several newly dedicated research centers. The universities that are leading this change are among the world's elite (discussed further in 2.1 and 2.2). The Environmental Humanities are expanding rapidly and articulating concerns relevant to medicine, animal rights, neurobiology, race and gender studies, urban planning, climate change, and digital technology, to name just a few fields. Generally, there has been a growing effort to engage environmental concerns, to communicate with a broad public, and to evoke a sense of wonder, empathy or urgency, which comes largely out of humanistic training and practice.

It is difficult to think of a single academic discipline that has not become engaged with the Environmental Humanities. In response to a survey of the field conducted by this committee, Australian scholar Libby Robin, suggested that the phrase Environmental Humanities: “refers to the human sciences that contribute to global change which include environmental concerns such as climate change, global ocean system change, biodiversity and extinctions, and atmospheric carbon. It is an interdisciplinary area that considers the moral and ethical relations between human and non-human others (at all scales up to planetary). Because ‘the environment’ has been defined by biophysical indicators and studied through ‘environmental sciences’ (a term that dates back just 50 years) and environmental economics, the moral, political and ethical dimensions of environmental degradation were long neglected as ‘outside the expertise’ of the dominant discourse. Attitudes and values are not easily measured, nor do they readily yield data that can be incorporated into modeling of future scenarios.” Yet environmental problems belong to us all, and the solutions will come from all fields of endeavor, including the humanities.

To provide one example, Earth System Science is a dynamic research field dominated by the physical, chemical, geological, and biological sciences, but it must also include societal and human values. Great uncertainties exist in our scientific knowledge of the earth system, and there is much to be learned about clouds, the oceans, the biosphere, geochemical cycles, and other processes. Human behavior is also quite varied and represents an unpredictable variable in the earth system. However, the historical dimension has not received adequate attention from the sciences, despite the fact that historians have studied both the changes in how climate change is conceptualized and the often misguided actions that societies have taken in response. Ideas and apprehensions have been changing as much as the climate itself. Historians examine not only our conceptual shifts in understanding nature but also transformations in technological capabilities. Moreover, major paradigm shifts are not solely attributable to changes in science and technology, but often are due to social and cultural factors. One essential role for the Environmental Human-

ities is to identify and understand these changes, so that science has an accurate baseline against which change can be measured.³

A second example is the burgeoning field of Animal Studies. A recent issue of the *Journal for Critical Animal Studies*, published by Brock University, Canada, contains articles citing Judith Butler, Walter Benjamin, Michel Foucault, and Canadian author Margaret Atwood, all central figures within humanist discourse. There are also reviews of popular narrative films about animals, and reviews of books on animals and poetics and animals and art. At the same time the journal is undeniably focused on social and policy issues, publishing articles with natural scientific and social scientific content. The University of Wollongong in Australia publishes *Animal Studies Journal*, offering a similar interdisciplinary focus with an admixture of humanist discourse. *Humanimalia*, a journal out of DePauw University in the United States, focuses on “human-animal interface studies.” Reaktion Books, distributed through The University of Chicago Press publishes a series on Animal Studies that includes such titles as *Looking at Animals in Human History*, *Animals in Film*, etc. Clearly these books are not solely within the realm of natural history, but explore from a humanist perspective what it means to be animal (as well as human), and how humans and non-human animals have lived together (not always in harmony).

The Environmental Humanities do not merely present improved ways to understand scientific and technological change. They offer a better understanding of the often human-based causes of those changes and the intricate relationship between people and the environments that they construct. This realm combining nature and culture differs from one society to another and from one time period to another, and these constructions are not only a matter of bricks and mortar, but also a complex social fabric made out of artifacts, language, works of art, ideas, attitudes, and an ever-changing sense of place. As the technological life-world changes, human beings must continually reinvent their relationship to this cultural construction. Indeed, societies face enormous problems and unprecedented choices. Human beings in societies such as Sweden have the power to revive extinct species. They can manipulate plant DNA to many ends. They can adopt new energy systems or persist in using fossil fuels. They can minimize their use of resources through recycling, or they can continue an unsustainable level of consumption. These and other environmental choices can be informed by a humanistic knowledge drawn from history, philosophy, literature and the arts, or they can be based on a functionalist economic calculus of profit and loss. Science and social science, for all their achievements, need the Environmental Humanities if such choices are to be made wisely. The old politics of knowledge, which long enforced a separation of the humanities from other fields, needs to be overhauled. The Environmental Humanities have started a new conversation, and they are developing new forms of research in which the old divisions are giving way to the urgencies of problems that cross boundaries between academic disciplines. These new studies follow both human beings and wild animals across political divides, trace water pollution that knows no boundaries, and consider varying human responses to climate change. These and other problems confronted by the Environmental Humanities are in and of themselves interdisciplinary, and to address them requires a new configuration of knowledge.

1.4 Summary: Three Salient Characteristics

Yet if the emergence of the Environmental Humanities seems inescapably rooted in the many environmental crises of the current era, this does not mean that

³ Hubert H. Lamb, *Climate, History and the Modern World*. London: Routledge, 1982. James Rodger Fleming, *Historical Perspectives on Climate Change*. New York: Oxford University Press, 1998. Mike Hulme, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity*. New York: Cambridge University Press, 2009. John Broome, *Climate Matters*. W. W. Norton, 2012.

in response a desirable configuration of institutions and talent will automatically emerge. For the Environmental Humanities have three salient characteristics that need to be taken into account when considering how they may develop.

First, they are inherently interdisciplinary, calling upon expertise in a range of fields, including at a minimum literature, the fine arts, philosophy, history, geography, and anthropology. Not surprisingly, much of the early interesting work in the Environmental Humanities has been done in already existing interdisciplinary fields. Leading practitioners also understand the field in this way. Second, works in the Environmental Humanities often cross national and cultural boundaries. They compare different national responses to similar problems, or engage issues of international concern such as global climate change, acid rain, species extinction, disposal of nuclear waste, or water shortages. While not all studies in the Environmental Humanities are explicitly international or transnational, most are at least implicitly so. Third, its practitioners often seek to be more than observers and critics. They want to be involved, and to have a role in shaping public policy and in shaping the values and the narratives that guide decision-making.

Each of these characteristics poses some problems. Being interdisciplinary runs the risk becoming superficial. Therefore, research teams need to be balanced between the disciplines involved. Because of possible funding constraints, some important disciplinary components of a problem may be under-represented in a research group. For example, work that crosses cultural boundaries risks becoming dismissive of cultural differences. Therefore, it is important that a team have real expertise in each of the cultures involved. Second, the desire to influence public debate requires scholars to simplify complex issues for the media. This process should not be left to chance, but should be built into each project to ensure that the long-term value of the research is communicated clearly, effectively, and at the appropriate level of detail. Third, the teamwork needed in the Environmental Humanities has long been common in the sciences but it has not been a feature of the humanities, where publications and positions have been individualized. Given the multifaceted issues being addressed in the Environmental Humanities, it is necessary to engage this aspect of humanities research, in order to bring together and develop teams of scholars with knowledge of several fields, cultures, and languages and yet still respect the career trajectories of the individual scholars involved.

Despite these and other challenges, however, the Environmental Humanities are expanding in almost all parts of the world, particularly in a few areas. The following chapter surveys this growth.

2 The Geography of the Environmental Humanities

2.1 Major Research Centers in the Environmental Humanities

In 2013 there are dozens of university or inter-university centers and national initiatives that support transdisciplinary research in the environmental humanities. Of these a few stand out as especially important centers in Europe, North America, and Australia. They either are institutes of advanced study or they are moving toward being such institutes, with a full range of multidisciplinary faculty, regular programs of visiting scholars, graduate students, conferences, links to museums, publications, and networks of international researchers. Many receive national public funding as well as private foundation grants and therefore are expected to produce research that contributes to solving environmental challenges identified by their governments or intergovernmental organizations. To operate such a center requires an annual budget of between two and three million Euros, supplemented by additional limited-term grants for individual projects. The situation is fluid, however, and several additional research centers (notably two emerging at Renmin University-Beijing and UCLA) might justifiably be included in the short list below, rather than in the following sections. Others can be found by consulting the list of participants in the Initiative Humanities for the Environment, which is part of the Consortium of Humanities Centers and Institutes (CHCI).⁴

Australian Environmental Humanities

Australian researchers have been central to defining Environmental Humanities. A national effort by the Australian Academy of the Humanities has made “Environmental Humanities: The Question of Nature” the topic of its annual symposium in November 2013 at the University of Queensland.⁵ While no single Australian institution or center can claim absolute priority, the overall activity of three main institutions in Australia places their work in the first rank worldwide. Researchers organized an Ecological Humanities network initially from within the Australian National University (Canberra), from which a core group of faculty and graduate students has subsequently developed into an international network of significant researchers made more visible by the group’s website.⁶ This network produced a special issue on ecological humanities in the *Australian Humanities Review*. Contributors to that issue along with other members have since published many monographs and edited volumes with an international readership. The University of New South Wales has the distinction of supporting the emergence of the environmental humanities on two levels: it sponsored the creation of the first journal in the

⁴ <http://initiatives.chcinenetwork.org/environment/members/>

⁵ <http://www.humanities.org.au/Events/AnnualSymposium.aspx>

⁶ <http://www.ecologicalhumanities.org/about.html>

field⁷ and it began one of the first undergraduate specializations in Environmental Humanities.⁸ The University of Sydney also has a strong Environmental Humanities Group representing faculty in history, literature, cultural studies, and gender studies. It hosted a conference on invasion ecologies and Anthropocene in July 2012⁹ and has plans to organize additional international meetings of Environmental Humanities researchers through the spring of 2014. The strength of Australian researchers in this field is reflected by the proportion of Australians represented on the editorial board of the online journal *Environmental Humanities*.¹⁰

Faculty of Environmental Studies, York University, Toronto

York University has an interdisciplinary Faculty of Environmental Studies (founded 1968) in which the humanities have stood on a par with the natural and social sciences.¹¹ York grants a PhD in environmental studies, hosts visiting scholars and post-doctoral fellows, and coordinates research projects that have received millions of Canadian dollars in external funding. York researchers have also pioneered multi-disciplinary research designs that involve community stakeholders, particularly in areas of contested land use, public health, and environmental justice research. Finally, the York FES supports researchers publishing influential work at the intersection of environmental humanities, postcolonial and gender studies, and social theory.

The Rachel Carson Center for Environment and Society (RCC), Munich

The RCC is an international center for advanced studies in environmental humanities that began as an initiative to internationalize German research on environmental history and to raise the profile of the humanities in public discourse on environmental issues. The center is a collaboration between Ludwig-Maximilians-Universität Munich and the Deutsches Museum and offers fellowships to post-doctoral through senior scholars to complete articles, books, and more innovative research projects while in residence. Since its foundation, approximately one hundred fellows from around the world have worked across the disciplines of history, sociology, anthropology, sociology, religious studies, cultural studies, literary studies, political science, geology, geography, and ecology. The RCC also coordinates a multidisciplinary PhD program and hosts public lectures, colloquia, and a film series, Green Visions. The RCC publishes a free online journal, *RCC Perspectives*, open-access digital collections via the Environment & Society Portal, two book series, and regular special issues of the journal *Global Environment*. Finally, the RCC sponsors museum exhibitions with its partner, the Deutsches Museum. The RCC was established with an annual grant of 2 million Euros from the German Federal Ministry for Education and Research (BMBF), with additional contributions each year of more than one million Euros from the University and the Deutsches Museum, as well as additional funding provided by foundations such as the Volkswagen Foundation and Siemens Corporation.

Center for Culture, History and Environment (CHE),¹² University of Wisconsin

CHE sponsors colloquia, hosts visiting affiliates from around the world, directs several graduate programs at the MA level, and has trained many promising new PhDs. It also sponsors a biennial environmental film festival, *Tales from Planet Earth*, and has filmmakers and writers in residence; the center also supports environmen-

7 <http://environmentalhumanities.org>

8 <http://humanities.arts.unsw.edu.au/areas-of-study/environmental-humanities-118.html>

9 http://sydney.edu.au/arts/research/environmental_humanities/

10 <http://environmentalhumanities.org/>

11 <http://fes.yorku.ca/>

12 <http://che.nelson.wisc.edu/>

tal artists by hosting exhibits and openings. These activities are reinforced with a growing online collection of digitized texts and images for conducting humanities research on the environment. CHE hosted the largest annual meeting of the American Society for Environmental History to date in 2012, attracting over six hundred scholars.

2.2 New and Emerging Research Centers

The Centre for Environmental History (ZUG) in Vienna is part of an Austrian inter-university network of interdisciplinary programs. In addition to regular lectures and symposia representing a collaboration of natural scientists and historians, Vienna hosts visiting research fellows and has a doctoral program in environmental history. For over a decade, ZUG has supported major research projects on long-term socio-ecological change in the Danube river basin, but increasingly research has focused further afield. Recent dissertations have included environmental histories of landscape change in Ecuador and New Zealand.

The Center for Ecological History at Renmin University-Beijing describes its aim “to become a multi-disciplinary and interdisciplinary platform...to strengthen dialogue between historians and scholars of ecology, environmental studies, geography, demographic studies, sociology, economics, law and public health.”¹³ The Center’s director is Mingfang Xia, senior professor of the Institute of Qing history, and the deputy director is Shen Hou, assistant professor in the Department of History. On 23 May 2012, the Center celebrated its opening with a conference featuring Chinese environmental and ecological historians, Christof Mauch, Rachel Carson Center (Munich) president of the European Society for Environmental History, and Nancy Langston, editor of *Environmental History* and former president of the American Society for Environmental History. Renmin has appointed a leading American environmental scholar, historian Donald Worster, as its honorary Director. Renmin will host an international conference of humanities research on the environment (May 2013), co-sponsored by the Rachel Carson Center. Renmin is also undertaking a series of translations into Chinese of major monographs in environmental history. It supports an annual journal, holds seminars on “Nature and Culture” and “Disasters and Society” and hosts a graduate colloquium.

Bath-Spa University hosts the European English-language journal in ecocriticism, *Green Letters*, which has been at the forefront of engaging critical theory, analyzing digital environments, and widening the foci of the Environmental Humanities. Bath-Spa hosted the European and UK-Ireland joint meeting of scholars in environmental literary and cultural studies conference in 2010. Since then, Bath-Spa has established a Master’s program and actively sought to coordinate programs with environmental humanities research centers across Europe.

2.3 Global Survey of Research Groups

Aside from these centers with strong support and focus on Environmental Humanities, there are many other research groups outside of Sweden whose activity is pertinent to the emerging field and who might serve as potential models or partners for international collaboration. This section will offer a global survey, though not an exhaustive list, of such research groups. The majority began as outgrowths of existing programs in history, literature, and STS, while more recent interdisciplinary research centers are being created by cluster hires at universities and through foundation grants, indicating that there is worldwide interest in the kinds of

¹³ Unpublished brochure. (2012). *Renmin University Center for Ecological History*. English and Chinese language.

knowledge that the Environmental Humanities create to help solve environmental problems, such as food security, energy use, and climate adaptation. There are also university sponsors of research in Environmental Humanities about whom we have insufficient information to include in this report, notably in India and Russia.

Europe

THE UNITED KINGDOM

since 2002, the University of Sussex has hosted the Centre for World Environmental History (CWEH) and produced research projects on the environmental history of the tropics and subtropics. The CWEH sponsors significant humanities research on the global environment, but it has not yet identified its work strongly with the emerging Environmental Humanities. CWEH is well connected; it has partnered with the British Library, Kew Gardens, and other UK and world institutions to produce historical and cultural research on environmental transformations in the British Empire, studies of disease, water, and history, and since 1991 a long-term study of the environmental history of South Asia.

Smaller multidisciplinary research circles that operate within larger social science or natural science faculties in British universities include the Environment, Landscape, Society Group at University College-London (geography)¹⁴ and the Society and Environment cluster within the Lancaster University's Environment Centre.¹⁵ In Scotland, Sterling University in Edinburgh runs a Centre for Environmental History and Policy¹⁶ while the University of Glasgow has its Solway Centre for Environment and Culture. The Solway Centre funds some post-doctoral research, a well-rooted project on the region's history, and also an affiliated graduate program in Environment, Culture, and Communication.¹⁷

IRELAND

The Trinity Long Room Hub (TLRH) at Trinity College Dublin hosts an innovative cluster of research projects in sustainability, including research on the national scale on the interaction of human populations and the natural world in Ireland.¹⁸ TLRH hosts the Irish Environmental History Network (IEHN) as well as the History of Marine Animals Populations project, a global initiative to study past interactions of humans with ocean life, marine resources research, and digital humanities. The IEHN supports the work of environmental historians as well as historical geographers and environmental archaeologists and has brought together natural scientists as well to produce innovative research tools such as the Irish Pollen Database online, a source for studying past vegetation cover in Ireland.

FRANCE

French research does not have one focal institution in Environmental Humanities. The major source of funding comes from the National Center for Scientific Research (CNRS), although additional support for environmental humanities in the short term may also come from the Ministry of Ecology or from the Ministry of Culture.¹⁹ French regional universities with centers of research in social history, science and technology studies, and urban planning can fairly be described as sponsoring research that contributes to the "environmental humanities." For example, the projects of the Historical Research Laboratory Rhone-Alpes (ENS Lyon)²⁰ are embedded in a regional territory that crosses national borders and disciplinary

14 <https://iris.ucl.ac.uk/iris/browse/researchGroup/1055>, <http://www.geog.ucl.ac.uk/research>

15 <http://www.lec.lancs.ac.uk/>

16 <http://www.stir.ac.uk/cehp/>

17 <http://www.gla.ac.uk/schools/interdisciplinary/research/solwaycentre/>

18 <http://www.tcd.ie/trinitylongroomhub/projects/sustainability/>

19 A representative of the French Ministry of Ecology, rather than the Ministry of Culture, attended a recent international workshop on environmental humanities hosted by the Research Institute for Humanity and Nature in Tokyo.

20 http://larhra.ish-lyon.cnrs.fr/index_fr.php, French language.

methods. Research activity in Paris, Versailles, and Montpellier on environmental subjects (adaptation, climate history, landscape transformation, ideas and representations of nature, environment and technology) appears embedded within existing programs in cultural history and critical theory, not as a distinct initiative. Despite the frequent engagement with French philosophers and cultural theorists within the Anglophone scholarship in the Environmental Humanities, that formation does not exist as such within *le monde francophone*. A symptom of the relative position of the humanities in French environmental research was hinted at by the social anthropologist Anne Matthieu at a roundtable devoted to the future of environmental research in France. She voices a concern of many humanities researchers elsewhere in the world that it is “not the vocation of the social and human sciences to give a simple varnish to environmental research projects [conducted] on a larger scale.”²¹

ITALY

In Italy, the Laboratory for Landscape and Cultural Heritage at the University of Florence²² has hosted a major research project led by Mauro Agnoletti at the national scale that combines urban and landscape planning, cultural history, forest ecology, and historical ecology. The Florence Laboratory supports the journal *Global Environment* and it coordinated research at fourteen Italian universities to produce a catalog of historical rural landscapes in Italy, also supported by UNESCO. Among other things, the catalog demonstrates how forms of traditional agriculture and their associated landscapes have produced greater biodiversity and control flooding better than reforested or recently urbanized areas. Their findings have influenced the national management of rural landscapes and had a dramatic practical impact in Italy.

ESTONIA

The Centre for Environmental History at Talinn University, (Keskkonnaajaloo Keskus or KAJAK, Estonia) has a very active research agenda; KAJAK hosts conferences, monthly seminars, and public lectures, and encourages doctoral research at Talinn.²³ The Centre’s focus is on the “co-action of the environment and human culture and their mutual influence throughout the history in shaping the present and future environment(s) and culture(s)” and the group actively seeks international collaboration.

OTHER EUROPEAN CENTERS

Among the smaller centers in Europe that sponsor interdisciplinary Environmental Humanities research, are St. Petersburg’s Center for Environmental History,²⁴ Hannover’s Center for Garden Art and Landscape Architecture,²⁵ and the Centre for Environmental Research at Turku University (Finland). In Switzerland, the Institute for Environmental Decisions (ETH-Zurich)²⁶ thus far has integrated environmental philosophers and social scientists into an established transdisciplinary network of natural scientists (the Swiss “td-net”). The network sponsored and provided theoretical underpinnings over several decades for major research projects in Switzerland, with partners outside Europe, though hitherto the humanities have been under-represented. Two other European centers have developed more recently: the University of Utrecht’s Centre for the Humanities and the Heidelberg Center for the Environment (HCE). Utrecht and Heidelberg represent how excellent

21 Agence Nationale de Recherche. *Huit ans de recherche en environnement*. (2012, December 12). <http://www.agence-nationale-recherche.fr/Colloques/Environnement2012/ANR-compte-rendu-colloque-environnement-11dec2012.pdf>

22 <http://www.mauroagnoletti.com/it/index.asp>

23 <http://www.tlu.ee/?LangID=2&CatID=5844>

24 <http://www.eu.spb.ru/en/research-centers/ceth>

25 <http://www.cgl.uni-hannover.de/de/>

26 <http://www.ied.ethz.ch/>

centers devoted to the humanities and the natural sciences, respectively, are now turning to the Environmental Humanities. At Utrecht, the Centre for Humanities' strengths in philosophy, critical theory, and gender studies have supported colloquia and visiting lectures exploring the social dimension of sustainability. The Heidelberg Center states that it "combines a wide range of environmental perspectives including natural sciences, social sciences and cultural studies" in its research program, although the social and natural sciences continue to be more represented in its research agenda. However, the cultural and historical component has been represented by social science and policy "bridge disciplines" such as human geography, political science, and law, to which in early 2013 the HCE added a new project on the environmental history of early modern famine.

The United States

Recent years have witnessed a flurry of competition between traditionally strong U.S. universities to claim a leading position in environmental humanities research. The University of California-Davis has an Environment and Societies: History, Literature, and Justice Initiative within its Humanities Institute, funded since 2009 in part through a Mellon foundation grant.²⁷ The UC-Davis initiative has hosted a colloquium, with invited distinguished lecturers, and it has an affiliated faculty and graduate program. It is a multi-disciplinary faculty research group studies "complex envirocultural problems" and the center also supports graduate students and postdoctoral scholars, as well as collaborating with communities affected by environmental challenges.²⁸

The Environmental Humanities Project at Stanford²⁹ hosts a lecture series and some guest researchers, but apparently not on a large scale. It has produced an impressive set of digital mapping projects. The future of the Stanford project is in flux, however, as in 2012 UCLA recruited two of its leading senior researchers to create a new humanities program within its Institute of the Environment and Sustainability.³⁰ The strong UCLA group in the environmental humanities includes historians, literary and new media scholars, philosophers, and art historians.³¹ They focus on the many roles that culture — and cultural differences — play in how societies define nature, understand particular ecosystems and respond, politically and scientifically, to environmental crises.

The University of Kansas has long been a major name in environmental history research by training an influential cohort of scholars through its PhD program under the guidance of Donald Worster, now retired. His replacement as chair, Edmund Russell, will seek to build on this traditional strength at Kansas, which will host the major international ecocriticism conference (ASLE) in June 2013.

A well-established program at University of Nevada-Reno, Literature and Environment enrolls between twenty and twenty-five MA and PhD students per year. Approximately a dozen faculty members contribute to a curriculum that offers courses in literature, theory, rhetoric, and writing. Additional programs and initiatives in Environmental Humanities have begun at Oregon State University, Florida University, Utah, and Bucknell.

The Transatlantic Research Network in Environmental Humanities has its American base at the University of Washington-Seattle with funding from the Alexander Humboldt Foundation to support "the work of a group of scholars engaged in joint humanistic transatlantic research on environmental topics. [...] The basic premise is that the humanities broadly construed in a transatlantic framework can play a

²⁷ <http://environmentsandsocieties.ucdavis.edu/>

²⁸ <http://environmentalhumanities.ucdavis.edu/>

²⁹ <http://ehp.stanford.edu/>

³⁰ Kendall, R. (2012, October 29). UCLA takes flight with environmental humanities. *UCLA Today*. Retrieved from <http://www.environment.ucla.edu/news/article.asp?parentid=16084>

³¹ <http://today.ucla.edu/portal/ut/ucla-takes-flight-as-a-leader-240175.aspx>

vital role in fostering social awareness and informed decision-making.”³² The Environmental Humanities Transatlantic Research Network was founded in 2012 and it will meet for the first time in June 2013 Munich under the rubric “Culture and the Anthropocene”.³³

The University of Virginia grants a doctorate in its History of Environment and Technology program and announced an Environmental Humanities Initiative (October 2011)³⁴ as part of a Mellon grant to hire ten new researchers in environmental and cultural humanities, in conjunction with their existing STS and humanities departments. Arizona State University made a significant investment in a School of Sustainability with support from a strong contingent of humanities faculty, though its doctorate program in sustainability and research program are clearly pitched in terms of a public policy and natural sciences model.³⁵ Finally, in March 2013, Princeton’s Environmental Institute hosted a conference on “Environmental Humanities as an Emerging Field,”³⁶ a sign that leading U.S. centers for advanced study in the humanities are moving into this new area.

Before this conference, in contrast to vigorous growth in Wisconsin and along the Pacific coast, the older and well-funded science and policy centers in the eastern United States such as the Columbia Earth Institute, Yale’s School of Forestry and Environmental Studies, Harvard’s Center for the Environment, and Duke’s Nicholas School for the Environment, have allocated proportionally fewer resources for collaborating with the humanities. Yale’s online journal, *Environmental 360*, contributes to public discourse on the environment primarily by amplifying the voice of researchers in the social and natural sciences. Harvard’s center has affiliated faculty across the humanities and hosts a fellowship program and lecture series in theory open to all disciplines, though in practice the vast majority of fellows (including all those in residence as of this writing) work in the natural or social sciences. Harvard hosted an inaugural event in the formation of environmental humanities in the United States in 2010, when it brought together the two leading ecocritics, Lawrence Buell (Harvard) and Ursula Heise (then at Stanford, now at UCLA). Older centers for advanced study in the U.S. are still testing the waters before investing further. Meanwhile, the number of humanities courses, interdepartmental programs, and faculty positions in environmental studies at excellent liberal arts colleges in the U.S. continues to rise, indicating a broader demand for these emerging forms of knowledge.

Canada

Aside from York University, research in environmental social sciences, rather than humanities, has been supported through the interdisciplinary Institute for Resources, Environment, and Sustainability at the doctoral level (University of British Columbia).³⁷ A group of human and natural sciences faculty at Concordia University (Montréal) have formed an Environmental Research Center and plan to host an international conference on museums, botany, and biodiversity in 2014. There is also the NICHE-network in Canada, which “brings together historians, geographers, and other researchers who study nature and humans in Canada’s past.”³⁸

³² <http://environmental-humanities-network.org/>

³³ <http://environmental-humanities-network.org/>

³⁴ Bromley, A. (2011, October 11). Mellon Grant Will Fuel U.Va.’s Humanities Faculty, Teaching and Research. *UVA Today*. Retrieved from <https://news.virginia.edu/content/mellon-grant-will-fuel-uvas-humanities-faculty-teaching-and-research>

³⁵ <http://schoolofsustainability.asu.edu/>

³⁶ Welles, H. (2013, February 11). The Emerging Field of Environmental Humanities. *Princeton Environmental Institute*. Retrieved from <http://www.princeton.edu/pei/news/archive/?id=9603>

³⁷ <http://www.ires.ubc.ca/>

³⁸ <http://niche-canada.org/>

Latin America

In Latin America, Colombia's Universidad de los Andes (Bogota) is the leading center for environmental history research.³⁹ The university hosts the website for the Society of Latin American and Caribbean Environmental History (SOLCHA), offers a doctorate in environmental history, and is hosting the first post-graduate "summer school" in 2013 to develop the field in Latin America, all of which argue for Bogota as a regional center of research, with other groups active in Brazil.

Japan

Japan's Research Institute for Humanity and Nature (RIHN, Tokyo)⁴⁰ was funded by the national government in 2001 and hosts multidisciplinary projects in residence on its campus in Tokyo for three to five years, involving thousands of researchers during its existence. Recently RHIN hosted a roundtable on "Humanistic Approaches towards Global Environmental Change" (March 2013)⁴¹ that brought international representatives to Tokyo, opening the possibility for future collaborations in global Environmental Humanities. Although the center was envisioned as international, a survey of its projects and their resulting publications reveals that RHIN focuses predominantly on a Japan-China world axis. While a few of these projects on long-term landscape change correspond with work conducted by environmental historians, RHIN has nonetheless configured its notion of multidimensional science along parameters set by physical sciences and technical research and development, with lab teams that are led by principle investigators. RHIN identified "creating the field of global environmental studies" as its defining mission, and to that end has hosted major international symposia and public seminars on a range of topics including cultural and biological diversity, garden cities, cities of the future, and the ecological history of Afro-Eurasia. RHIN also published an "Encyclopedia of Global Environmental Studies" in 2010 (Japanese language). RHIN has coordinated its research closely with Chinese partners and publishes its newsletter simultaneously in Chinese and Japanese.

As this tour of world centers of research activity suggests, some of the strongest universities have devoted considerable resources to the Environmental Humanities. Moreover, this new research field is increasingly conducted through international collaboration. In part because environmental problems so often cross tidy national borders and in part because of the political economy of advanced research, environmental humanities constitutes itself in cosmopolitan terms.

Finally, one should note that the umbrella organization ASLE (Association for the Study of Literature and the Environment) serves as a clearinghouse and gathering place for many different organizations and activities, both in the United States and abroad. It is the single most important association devoted to the study of the humanities and the environment in the U.S., with extensions or branches in Europe, the UK and Ireland, East Asia, India, Canada, and Australia. ASLE's model for creating a productive zone for conversation has already been noticed by Swedish scholars, and a network of the ASLE type could be developed easily in Sweden.⁴²

2.4 NIES (Nordic Network for Interdisciplinary Environmental Studies)

NIES was founded in Oslo in 2006. It has grown from a group of a dozen researchers in three Nordic countries (Denmark, Norway, and Sweden), to more than 100 researchers from all five Nordic countries, with roughly one third of the research-

³⁹ <http://solcha.uniandes.edu.co/index.php>

⁴⁰ http://www.chikyu.ac.jp/index_e.html

⁴¹ http://www.chikyu.ac.jp/rihn_e/events/2013/130316-17.pdf

⁴² www.asle.org

ers from Sweden, apparently including all the institutions involved in the Environmental Humanities.

NIES defines itself as “[a] network devoted to multi-/interdisciplinary environmental studies, with a particular ambition to develop this research field within the humanities . . . NIES supports and promotes the production of new knowledge on environmental questions based in or significantly involving subjects and disciplines situated in the humanities.” To date, it has been funded by NordForsk, Riksbankens Jubileumsfond, the Norwegian Research Council, and the Sigtuna Foundation. The grant from NordForsk is of primary significance, and it runs out in 2014, but after that date there will be continued collaboration with the Sigtuna Foundation in holding conferences. New sources of funding will be sought.

NIES has organized symposia (with published proceedings), workshops, and intensive researcher training courses in Denmark, Norway, Iceland, and Sweden, with one more planned in Finland for September 2013. These include the symposium *The Environmental Humanities: Cultural Perspectives on Nature and the Environment* and its accompanying seminar *Advancing Theory and Method in the Environmental Humanities* (both held in Sigtuna, 2011). A peer-reviewed volume will appear in the autumn of 2013 based on the symposium, entitled *Defining the Environmental Humanities*. “The symposium was meant to introduce and define the field of the environmental humanities more systematically in the Nordic countries and provide a viable model for the disciplinary constituency and intersections of this emergent field in a wider international context.”⁴³

NIES is responsible for a new series of publications with Rodopi Press, *Studies in Environmental Humanities*, with the first volume, *The Anti-Landscape*, to be published in 2013.⁴⁴ Other activities include a project in Iceland linking environmental humanities and science, *Inscribing Environmental Memory in the Icelandic Sagas*, and an initiative to organize greater European cooperation between groups in the Environmental Humanities. It should be emphasized that, like other scholarly associations, NIES is a network and a facilitator of research and publication, not an organization linked to one university or sponsored by a single institution. Until now it has not needed to charge members an annual fee, but one might expect it to mature into an organization with elected leaders, dues, and perhaps its own journal.

2.5 Research Centers in Sweden

Research and teaching in the Environmental Humanities occurs at a number of Swedish institutions, where scholars do not so much compete in one area as they pursue quite varied lines of inquiry. What follows is not an exhaustive list, and it should not be read as an attempt to rank their research efforts. The list includes centers of activity that the Working Group could find with the assistance of Mistra’s administrators. Representatives of these institutions were invited to a one-day seminar at Mistra in January 2013, and in many cases further email communication enhanced the committee’s sense of their activities. (A list of participants is in the appendix.)

Environmental Humanities Laboratory, KTH, Stockholm

Founded in 2011 with private funding of 15 million SEK and 5 million SEK from KTH, the Environmental Humanities Laboratory on the initiative of Professor Sverker Sörlin. “Its overall goal is to shape a post-disciplinary intellectual environment that combines education, research and graduate training in innovative ways and sets knowledge in the humanities into action to favor sustainable

⁴³ Link to conference at http://www.kth.se/polopoly_fs/1.2811061/Menu/general/column-content/attachment/steven_booklet_webb.pdf

⁴⁴ <http://www.rodopi.nl/senj.asp?SerieId=SEH>

development.”⁴⁵ Professor Sörlin is also co-author of a book on the Environmental Humanities, *Alltings Mått: Humanistisk kunskap i framtidens samhälle*, which is about to be published.⁴⁶ The laboratory has four research tracks – writing, seeing, sensing, shaping – all of them with an emphasis on historical development. (“Writing” investigates textual documents of various kinds, “seeing” analyzes visual cultures, “sensing” looks at other forms of experience in nature not covered by textual and visual forms, and “shaping” has to do with the creation of spaces, architectural, landscaped, and urban). These tracks are “wide categories that should be seen as open arenas for interaction of scholars with similar interests, including PhD students.” Both undergraduate and graduate education is carried out in the laboratory, with an emphasis on the transformation of the humanities (in a “post-disciplinary” setting) and the introduction of elements from the humanities into a technological studies setting. The concept “enviroming technologies” (“that the environment is a historical formation by people and societies which form their surroundings and themselves and thereby use knowledge, technology, and aesthetics”) forms the backbone of Ph.D. research. The Laboratory has hired Marco Armiero as director and has four Ph.D. research positions about to be filled. The Laboratory has established international collaborations of varying levels of intensity with some of the world’s major centers, including the African Centre for Cities (ACC) at the University of Cape Town, the Stanford Environmental Humanities Project, the Center for Environmental History at the Australian National University, the Center for Environment and History at the University of Wisconsin, Madison, the Rachel Carson Center, and with Sciences Po, Paris and the University of Tartu.

Centre for Sustainable Development / Centrum för Miljö- och Utvecklingsstudier (CEMUS), Uppsala University⁴⁷

Founded in 1995 CEMUS is a collaboration between Uppsala University and the University of Agricultural Sciences. It began as a student initiative. CEMUS offers graduate students from various disciplines an institutional space where they can develop courses and research topics. It allows two graduate students from different disciplines to work together to form and teach interdisciplinary courses. The course organizers are joined by a working group of researchers, teachers, and practitioners. Students and researchers working within CEMUS and the interdisciplinary forskarskola CEFO receive support to participate in seminars, organize workshops, guest lectures series in connection with courses, conferences, symposia, research trips and publications. Topics taken up from 2002 to 2012 have included environmental history, theory and methods for the study of human beings and the landscape (2002), ecological criticism, studies in environment and development (2003), Genus, environment and development (2006), Eco-criticism: reading for a sustainable world (2008), Representing Animals, Nature and Environment in Visual Culture in Conjunction with Gender Studies (2010), and Critical Studies in the Development of Capitalism (2011). Much of the work published by CEMUS is in the social sciences (with a notable presence of the natural sciences), but these publications include the first Swedish volume on ecocriticism: *Ekokritik: natur i litteratur (en antologi)*.⁴⁸ In addition to Professor Eva Friman, other faculty from such departments as Gender Studies have been affiliated with CEFO projects, particularly in the realm of Animal/Human Studies. The graduate student interest in interdisciplinary studies is notable at the doctoral level, providing opportunities for teaching, advising, research, and publication to more senior scholars as well. On

⁴⁵ <http://www.kth.se/en/abe/om-skolan/organisation/inst/philhist/2.3231/ehl/kth-environmental-humanities-laboratory-1.326400>

⁴⁶ Anders Ekström and Sverker Sörlin. *Alltings Mått: Humanistisk kunskap i framtidens samhälle*. Stockholm, Norstedts, 2013.

⁴⁷ <http://www.csduppsala.uu.se/cemus/>

⁴⁸ ed. Sven Lars Schulz, CEMUS publication series, 2007.

the whole CEMUS seems to be largely an in-house organization to enhance communication and increase opportunities using local resources, providing a platform for interdisciplinary work.

Mind and Nature Node, Uppsala University⁴⁹

A second, apparently quite separate, research node at Uppsala is a collaboration between Archival Science, Library & Information Science, Museum & Heritage Studies (ALM), Department of Archaeology & Ancient History, the Centre for Gender Research, Department of Art History, Department of History of Science and ideas, and the Department of Cultural Anthropology and Ethnology. They describe their research as humanistic, although at times it appears close to the boundaries of social science. The broad focus is “the relationships between individuals, society and the environment in the form of spatial and temporal analyses. The aim is to understand and explain the interaction between humans and the environment in history and today.” In practice, research concerns political and legal systems and environmental change, the relationship between practices of visual representation, perceptions and natural resource management, and how art and public debate contribute to understanding of environmental issues, social justice, and sustainable development. It is not clear what funding is available. The group apparently relies on support from affiliated departments to create a forum for exchange.

Ekokritiskt Forum, Mälardalen University

Founded in 2007, this association of ten researchers and four graduate students from Comparative Literature, German, and English focuses on ecocriticism, broadly defined. They have participated in conferences (both in Sweden and abroad), have ties to the Association for Studies in Literature and the Environment in North America, and EASCLE (European Association for Studies in Culture, Literature, and the Environment). They have organized seminars, courses, and guest lecturers. Students can develop work across departmental lines.

The Posthumanities Hub, Linköping University⁵⁰

Linköping University has an unusual structure, in that traditional disciplines are organized around themes (tema). Within each theme a network of individual researchers from various disciplines can be attracted to the same research “hub,” or *forskarplattform*. In this case, researchers have defined a field defined around the work of American researchers such as Cary Wolfe and Donna Haraway, that delves into questions of what it means to be human or animal, what it means to be gendered, and in particular, what it means to be animal or human in a digital age (sometimes defined as the posthuman age). The hub at Linköping seeks to abandon traditional disciplinary distinctions and link researchers in the humanities, social sciences, and natural sciences. This hub is headed by Cecilia Åsberg, who has national prominence in Sweden in gender studies. To some degree this location determines the primary interests of the researchers. A current project, funded by the Swedish Research Council, gathers scholars from the Netherlands, Norway, Sweden, Canada, and the U.S., to study “The Post-Humanities Network: Next Generation.”

Umeå Studies in Science, Technology and Environment (USSTE)⁵¹, Umeå University

This interdisciplinary research group is situated in the Department of Historical, Philosophical, and Religious Studies (Institution för idé- och samhällsstudier), and includes several humanist fields, notably environmental history. They describe

49 <http://www.arkeologi.uu.se/Research/Projects/mind-nature/?languageId=1>

50 <http://www.tema.liu.se/tema-g/Posthuman/posthumanities-hub?l=en>

51 <http://www.org.umu.se/usste/english/>

their work as a combination of Environmental Humanities and Science and Technology Studies. Ranged under the Environmental Humanities heading are fields are archeology, ethnology, and geography, as well as more traditionally humanist disciplines (history, literature, philosophy, theology, visual and cultural studies, etc.) Very broadly interdisciplinary with an aim toward crossing the divide between the so-called soft and hard sciences, the center has supported such research topics as “Ethical aspects of sustainable development,” “Nature through the lens: Studies of Stig Wesslén’s depictions of Nature and Sami features,” “Strategic environmental archeology database,” “Norwegian leisure cabins: A history of technology and environment,” and “The history of capitalism in Europe, Latin America, and the United States, from the long sixteenth century to the neoliberal era.” The head of the center, Christer Nordlund, is an environmental historian with a background in the history of science and technology, and the focus of the group’s research projects gravitates in that direction. Affiliated faculty from other disciplines, include culture and media studies, philosophy, and Sami research. The research group has experience working on a Mistra-supported project, Future Forests, and Nordlund was the chief author of the report “Miljöns mänskliga dimension” (2002), financed in part by Mistra. It examined interdisciplinary environmental studies in the humanities and social sciences. This year USSTE will offer an interdisciplinary course in Comparative Forest Histories of the Global North, apparently in conjunction with research being carried out under the Future Forests rubric. A seminar series offers a forum for the exchange of ideas. The broad interdisciplinary reach described on the group’s website seems to have materialized only in part, with rather little research in humanist fields other than history, broadly defined. But there is potential for developing projects within this framework.

Human Ecology Division / Human ekologi avdelning, Lund University⁵²

The Lund Human Ecology division works at the juncture of culture and environment, with a focus on ecology and non-European cultures, including Latin America, Africa, and Asia. Environmental history is also represented, as in a research project on Swedish neolithization. The group is particularly interested in breaking down traditional distinctions between humanities, social sciences and natural sciences to achieve a more integrated perspective. They offer an MA, and there are several Ph.D. students, three professors, and several researchers affiliated with the division. Most projects have a social science focus but many have humanistic elements, including: “The Prehistory of Amazonian Languages,” “Existential aspects of nuclear waste storage,” “Modernity and Modernism in the Muslim Gulf,” “Native American Ecocosmologies and Environmental Ethics,” and “Negotiating Nature,” which deals with the signs, symbols, and metaphors attached to negotiations of environmental policy. The cultural and intellectual reach of the Lund faculty has enabled them to receive funding for a significant number of projects.

2.6 Needs and opportunities in the Environmental Humanities

As the sheer diversity of the Swedish research efforts illustrates, a great variety of scholars are involved, making definition of the field difficult. Even with the impressive activity worldwide and in Sweden the Environmental Humanities face many challenges and practical concerns. More stable funding is required to sustain programs over the long term. Advanced degree programs are needed in order to provide career opportunities for students. Greater contact and collaboration across humanities disciplines is desirable, and environmental humanists also need to

⁵² <http://www.hek.lu.se/o.o.i.s/11185>

show that they can interact with and add value to the work of natural and social scientists. At the same time, the Environmental Humanities need to reach out to and include the fine arts and performing arts, and to engage with interdisciplinary fields such as cognitive science, visual and media studies, and the Digital Humanities. The scholars in Environmental Humanities must demonstrate more fully the relevance of their research for policy-making. As if this were not a large enough agenda, the Environmental Humanities will need to become ever more international, and to give greater attention to technology, the economy, and world affairs. This is a daunting list of challenges. Yet opportunities to work across boundaries are emerging; one notable arena is collaboration with museums (discussed in 3.4).

The formation of a centralized and visible national consortium for the Environmental Humanities in Sweden would enhance the connections Swedish researchers have already made with their counterparts abroad. It would also create a platform for the further development of international exchanges with centers in the Baltic region and major centers elsewhere. Estonia and Finland are natural partners for Sweden in environmental discussions, and the Estonians have a long-standing interest in the Environmental Humanities. Forging ties with the relatively new Environmental Humanities center in Beijing would augment recent Swedish efforts to strengthen ties with China through education and business. In other words, the emergence of Environmental Humanities Centers around the world (as described in section 2.3) makes the founding of a similar center in Sweden particularly desirable at this juncture.

2.7 Conclusion

From a global perspective, it is timely to consider a major Swedish initiative in Environmental Humanities. None of the important centers are old, and major centers, such as those in Beijing or at UCLA, are just emerging. The European Union has put the Environmental Humanities on its agenda for discussion at the President's meeting in September of 2013, and it may be designated as an area that can receive European research funds.

At recent conferences in the U.S., Japan, China, and Europe, the Nordic nations have perhaps been under-represented, further suggesting the need for a more focused Swedish initiative, especially as there already are a good many promising developments in the Environmental Humanities at Swedish universities. If a ranking methodology for this new field existed, the Working Group estimates that Sweden would not be in the top five. These would appear to be (in alphabetical order) Australia, Canada, Germany, Great Britain, and the United States. But Sweden does appear to be in the top ten. Building on existing networks and strengths, a major initiative in the environmental humanities would make Swedish research the clear leader of this emerging field in the Nordic countries, and among the top three centers in Europe. Consistent long-term support could move Sweden to the world's absolute top level, among a small number of dedicated research centers for the Environmental Humanities, notably those in Munich, Beijing, Wisconsin, York, Australia, and, in all likelihood, UCLA. Without a major initiative, however, Swedish institutions will probably not reach the first rank. Shorter term support over a period of four or five years can keep Sweden competitive, so that it might later move up to the highest level, but in five years the first-mover advantage will be gone.

3 Mistra's Potential Role in the Environmental Humanities

3.1 Justification

Since the founding of Mistra two decades ago, environmental research has increased in scope, driven by intensifying scholarly interest and by the growing awareness of global environmental issues. Accordingly, Mistra has widened its range of activities, evolving in line with its own Statutes, which declare:

The Foundation shall promote the development of strong research environments of the highest international class with importance for Sweden's future competitiveness. The research shall be of importance for finding solutions to important environmental problems and for a sustainable development of society. Opportunities for achieving industrial applications shall be taken advantage of.⁵³

This wording avoids the common division between "pure" and "applied" research, in apparent recognition of the fact that in practice it is often hard to make this distinction. Keeping in mind Mistra's focus on sustainability, international competitiveness, and possible commercial applications the question is whether a relatively modest investment by Mistra in the Environmental Humanities will promote the development of a strong research environment of the highest international class and place Sweden at the forefront of environmental scholarship and stewardship. This particular investment would be directed toward human capital, with little need for expenditures on infrastructure or equipment.

3.2 What are the Benefits for Mistra?

The question of what benefits there might be for Mistra has been explicitly raised by the Board. The Environmental Humanities have much to offer. The humanities have developed sophisticated methods to understand the narratives that frame behaviors, including how individuals and societies manage resources, respond to disasters, and adapt to drastically altered environmental conditions. A sustainable society will not emerge simply because new technologies have been invented. They must become part of everyday life, integrated into the narratives of living, and embedded in larger cultural self-conceptions. At the present time, in the developed world, these narratives of living are intertwined with and reinforce an unsustainable culture of consumption. In the case of Sweden, a World Wildlife Foundation report from 2008 estimated that "we would need another two planets to sustain our lifestyle if everyone in the whole world lived like we do in Sweden."⁵⁴ The American lifestyle, if taken up by all, would require over four planets. To come

⁵³ Mistra Statutes, Published 28 June 2012 <http://mistra.org/en/mistra/mistra/statutes-for-mistra.html>

⁵⁴ Jan Minx, Kate Scott, Glen Peters, and John Barrett, *An Analysis of Sweden's Carbon Footprint*. World Wildlife Fund, 2008. http://www.wwf.se/source.php/1211289/An_Analysis_of_Swedens_Carbon_Footprint.pdf

into balance with the earth requires engagement with ordinary Swedish citizens. Indeed, more than 75 percent of the country's greenhouse gas emissions come from ordinary households.⁵⁵

Sustainable development requires new technologies and these in turn lead to new social practices, new ethical dilemmas, and new problems of maintaining cultural continuity. Cultures do not all embrace (or reject) the same technologies or use them in the same ways, and some have a considerably smaller carbon footprint per capita than others. The Environmental Humanities address issues about living ethically and contribute both to understanding and to acting responsibly in an increasingly technological society. The following examples of beneficial projects are divided into two groups. The first have commercial value that can be quantified, as has been the case with many previous Mistra projects. The second set of examples has benefits in areas harder to quantify, such as ethics, cultural narratives, self-understanding, and aesthetic value.

3.3 Quantifiable Results

► **Ecological Tourism.** Tourism is one of the fastest growing businesses in the world, worth almost \$1 trillion annually, and by 2007 ecotourists spent \$77 billion for vacations that were ecologically responsible. This segment of the market is growing by 10% or more per year. National parks, scenic landscapes, and seascapes have always been popular, but a growing percentage of travelers want to know the history and cultural meanings of a natural site. Many also want to understand local ecological systems and even to engage in conservation work for agro-ecological restoration projects.⁵⁶ Responsible ecotourism contrasts with conventional tourism by attending to the integrity of local cultures and ecosystems. It includes recycling, energy efficiency, water conservation, respect for other species, and creation of economic opportunities for local communities. Ecotourism is a growing and lucrative market segment that is not satisfied by glossy photographs and a slick advertising campaign but demands environmental and social responsibility. Ecotourism can therefore benefit from the insights and communication skills of the Environmental Humanities in the development of interpretive material, the creation of exhibits, the design of spaces, and the preservation and enhancement of the local ecology. Moreover, promoting this kind of tourism has a valuable secondary effect by raising local awareness of environmental issues and increasing pride in a region's natural heritage. The United Nations has a program designed to help poor nations develop ecological tourism as a route to sustainable growth.⁵⁷ It has found that ecotourism leads to measurable improvements in environmental and economic impacts. This area has also been recognized by the EU. The European Ecotourism Knowledge Network (ECOLNET) is a three-year project (2010–2013) co-financed by the European Commission.⁵⁸ Furthermore, Sweden has a trade organization in this area that might partner with the Environmental Humanities.⁵⁹ In addition, major corporations such as the Hilton Hotel chain are adopting goals in line with Green Tourism. Hilton's goal by 2014 is to reduce energy consumption from direct operations by 20%, cut carbon emissions by 20%, and reduce output of waste by 20%.

⁵⁵ Ibid., p. 6.

⁵⁶ Conservation Volunteers International Program. 2013. <http://www.conservationvip.org/>

⁵⁷ United Nations World Tourism Organization. STEP Program – Sustainable Tourism Eliminating Poverty. <http://www.unwto.org/step/about/en/step.php?op=1>

⁵⁸ Lifelong Learning Programme, Transversal Programmes, Key Activity 3 – ICT Networks. <http://www.ecotourism-network.eu/en-about-us/en-ecolnet>

⁵⁹ Svenska Ekoturismföreningen, Alströmergatan 22 112 47 Stockholm, <http://www.ekoturism.org/> See also <http://www.ecotourism.org/ecodestinatons-europe>

- ▶ **Energy Use.** A generation ago one California electrical utility realized that its customers were using refrigerators more than they had expected. Because they could not understand what was going on from a functionalist model of the refrigerator as a machine for food preservation, they hired anthropologists to investigate. They found that refrigerators were used for far more than to store food. Families also used them to hide money in fake plastic cabbages, to store photographic film which lasts longer when kept cold, to give nylon stockings longer life, to allow pet snakes to hibernate, and to preserve drugs. At times people opened their refrigerators with no definite purpose in mind, mentally foraging, trying to decide if they were hungry and whether anything inside was appealing. Often, they closed the door again without removing anything. The refrigerators were using more power than expected due to these and many other unanticipated uses. The anthropologists realized that every mechanical device suggests new ideas for its own definition. Indeed, the refrigerator began “to take on altogether new identities – as a vault, closet, display case, morgue,” and more. Based on this study, the California utility was better able not only to predict demand but also to change consumer demand. Likewise, other new technologies of a sustainable society will have multiple, unexpected uses, and the citizens need to manage the identities of these new products in visual, tactile, and verbal ways. The humanities offer methods not only to understand this process but also to shape it toward environmentally sound objectives

- ▶ **Informing Consumer Choices.** The Environmental Humanities can help make sense of both historical and emerging patterns of consumer choices. They can have a practical value for a utility seeking to understand energy use (and not just in refrigerators), for a government agency that wants citizens to adopt a new recycling system, or for a corporation that wants to develop an iPhone application that will help consumers to make efficient use of its product. Rhetorical and historical analysis that is independent of market pressures is a valuable resource that can, for example, test whether or not the public believes in and values a “green” or “ecological” label for products or processes. If consumers do not have confidence that purchasing sustainable products has real value, then they will reject sustainable choices. Lack of critical, independent research on consumption from cultural, historical, and philosophical perspectives could damage a generation’s progress on sustainable consumption. A noxious cynicism, which sees all green marketing as green-washing, could take hold. More generally, consumers need to learn ways to escape Jevon’s paradox, in which increased efficiency only increases consumption, and therefore leads to no net gain. The Environmental Humanities can be useful in such informational and educational campaigns. These will be increasingly important, given that scientists reported in May, 2013 that carbon dioxide had passed beyond the threshold of 400 ppm. “The best available evidence suggests the amount of CO₂ in the air has not been this high for at least three million years, before humans evolved, and scientists believe the rise portends large changes in the climate and the level of the sea.”⁶⁰

- ▶ **Reconceiving Cities as Ecologies.** Environmental humanists frequently point out that human beings are themselves biological organisms and that their cultural institutions are tightly linked to natural cycles in climate and to the landscape. In line with this way of thinking, a movement has developed to transform cities, reconceived as ecologies. Many buildings have green roofs that save energy and reduce rain runoff, new structures are designed to minimize energy use, and a new generation of urban planners is dedicated to reducing a city’s CO₂ footprint to zero. This is the goal, for example, of the city of Sønderborg in Denmark. Sweden already has many green initiatives that are part of this larger trend. For example, Växjö seeks to be the “Greenest City in Europe” and it reduced its CO₂

60 “Heat-Trapping Gas Passes Milestone, Raising Fears,” *New York Times*, May 13, 2013.

emissions per inhabitant between 1993 and 2011 by 41%. It is seeking further reductions as part of an energy transition toward non-fossil fuels, and in 2013 it hosted the “Energy-Cities and Klimatkommunernas Annual Meeting.”⁶¹ Växjö has actively sought to spread its experience to other cities, notably to a number of Southeast Asian cities. As this movement spreads to more communities, the Environmental Humanities can supply part of the expertise required.

3.4 Non-Quantifiable, Vital Issues

- ▶ **Biotechnology.** George Church, a Harvard Medical School geneticist, has noted that soon scientists will be able to recover extinct species. He notes, “Our technological capacity outstrips what it all means. Who will be doing this and what are the regulations?”⁶² The Environmental Humanities, with their combination of philosophy, history, anthropology, and nature writing, are needed to understand the implications and draw up some ethical ground rules in this area. The same is true of other issues raised by advances in genetics, such as cloning, the development of genetically modified crops, and other issues raised by synthetic biology. This has become an urgent issue because the cost of DNA modification has fallen in recent years, enabling amateurs to begin tinkering with plant and animal biology. In the spring of 2013 a group of hobbyists successfully raised a quarter of a million dollars for a project to add genes for bioluminescence to trees, which they expect one day might replace streetlights. Despite the unforeseeable and potentially dangerous effects of haphazard introductions of new transgenic species, popular scientific magazines celebrate these practices as “a sustainable alternative to electric lumination.”⁶³ At the very least, such biotechnologies warrant involving humanities scholars such as ethicists and historians who study the impacts of past species introductions.
- ▶ **Species Diversity.** Habitat destruction and new species introductions are leading a sixth global extinction event, and the loss of species diversity is inherently nested in social, political, and normative issues. Historians, philosophers, ecocritics, and anthropologists as well as conservation biologists have contributed critical work to conceptualize biological diversity, re-framing its ethical challenges and the political and social contexts in which such diversity is negotiated.⁶⁴ The innovative practice of “multispecies ethnography” has been intentionally positioned within the environmental humanities as way to understand human activities alongside and in parallel with the agency of other still-evolving forms of life.⁶⁵
- ▶ **Wilderness Land Policy.** During the 1960s preserving wilderness areas seemed to be an ideal way to protect natural diversity. However, the concept of wilderness was successfully challenged by environmental historians in the 1990s, which has led to a wholesale rethinking of how public lands and natural areas are managed, often involving local stakeholders whose presence and long-term use of natural resources had been overlooked or excluded, even to the detriment of biodiversity. Research by environmental humanities scholars continues to feed back into the management of natural resources and lands, for example in a discussion taking place in May 2013 about whether or not to introduce addi-

61 <http://www.vaxjo.se/sustainable>

62 Gina Kolata, “What if a species could be brought back?” *New York Times* [global edition] 20 March, 2013, 5.

63 4 May 2013. *New Scientist*.

64 Gary Martin, Diana Mincyte, Ursula Münster, eds. “Why do we value diversity? Biocultural diversity in a global context.” Special issue, *RCC Perspectives* no.9 (2012), http://www.carsoncenter.uni-muenchen.de/download/publications/perspectives/2012_perspectives/1209_biocult_web_color.pdf

65 Eben Kirksey, “Living with parasites in Palo Verde National Park.” *Environmental Humanities* vol. 1, <http://environmentalhumanities.org/arch/vol1/EH1.3.pdf>

tional wolves to the wilderness area on Isle Royale on Lake Superior, where the moose herd is becoming too numerous. In the past the island's wolf population was occasionally replenished in winter, when the area became accessible over the frozen ice. This is seldom possible now, however, due to global warming, and the excessive number of moose are upsetting the local ecology. In such cases, the notion of a pure, wilderness untouched by humans seems antiquated. To put this another way, the concept of the "Anthropocene" by definition forces a rethinking of how best to protect places officially designated as "wilderness."

- ▶ **The Anthropocene.** What does it mean for humanity to be moving from the age geologists call the Holocene—where historical records originated, to the Anthropocene—where it seems we may meet our demise? The concept places the Environmental Humanities at center-stage in conversations with natural and social scientists, because the term functions as a historical periodization as well as a normative and politically-contested claim about human modification of the globe. Philosophers, historians of science, and critics in rhetoric and envirotech alike can help people use this term wisely, alert to the heavy-handed interventionist potential of an Anthropocene concept that may only justify risky manipulation of planetary systems. On a less speculative level, the concept connects knowledge and artifacts of the present with those of the geological past and the near and distant future. It also opens up discussions about the ambivalence toward technologies, which are both part of many environmental problems and possible solutions. There has been a flurry of recent and upcoming initiatives on this theme.⁶⁶
- ▶ **The Ethnography, History, and Rhetoric of Environmental Organizations.** Environmental movements and organizations have acted on a global scale for over half a century. Conservation groups and governmental agencies have in several nations well over two centuries of archives. Yet in many areas where these groups have been active (wildlife conservation, water and air quality, population density, landscape preservation), popular narratives emphasize simple stories of decline. The failures and surprising successes of past "environmentalist" organizations came with unintended and obscured consequences meted out unequally to different social groups and species. The problematic history of environmental organizations is relevant for those who want to do better in the future. Here the expertise of humanities research can help current policy-makers accurately interpret past efforts and evaluate their efficacy. Historians, anthropologists, literary critics, and media scholars are examining the work of non-governmental organizations and international organizations in critical frameworks such as cultural and postcolonial studies,⁶⁷ green rhetoric,⁶⁸ and knowledge societies.

⁶⁶ Events for 2012–2014 include "The Anthropocene: Planet Earth in the Age of Humans," the Smithsonian Institution Grand Challenges Symposium, Washington, DC, Oct. 2012, brought scientists, humanists, curators, and the general public into conversation on issues related to the Environmental Humanities. In December 2012, the Berlin House of World Cultures launched the Anthropocene Project (<http://www.youtube.com/user/HKWanthropocene>) which will lead to a major exhibit at the Deutsches Museum opening in 2014, "Anthropocene: Nature and Technology in the Age of Humans" that seeks to bridge historical boundaries between museums of technology, history, art, and natural sciences. Additionally, "The History and Politics of the Anthropocene," at the University of Chicago, May 17–18, 2013, is bringing together historians, philosophers, and geologists, and social scientists in a conversation about the Environmental Humanities. "Curating the Anthropocene: Debate and Discussion," at the American Historical Association annual meeting, Washington, DC, January 2–5, 2014 is a roundtable aimed at grounding the diverse thinking, soaring rhetoric, and potential disagreements about the Anthropocene in actual museum practice.

⁶⁷ Karl Jacoby, *Crimes against Nature: Squatters, Poaches, Thieves and the Hidden History of American Conservation*. Berkeley: Univ. of California P, 2003.; Frank Zelko, *Make It a Green Peace! The Rise of Countercultural Environmentalism*. Oxford UP, 2013; Thomas Lekan, *Saving the Serengeti: Tourism, the Cold War, and the Paradox of German Nature Conservation in Postcolonial Africa, 1950–1985*. (forthcoming 2014).

⁶⁸ George Lakoff, "Why it matters how we frame the environment." *Environmental Communication* 4 no. 1 (2010): 70–81.

- ▶ **Climate Awareness.** Global change science often points to planetary processes that loom so large as to be depersonalized. But some scholars in the Environmental Humanities seek to decouple climate from its currently exclusive association with global change science and revisit the implications of an ancient vocabulary for medical, geographical, agricultural, economic, racial, and other “endemic” concerns. Climate is not just about the weather, but is linked with other key words, such as justice, inequality, civilization, time, and change. Climate is a proxy for other concerns such as regulation, industry, and identity. Some of the best new work involves local experiences of global change—climate as it is sensed on the ground, as it is mediated by knowledge and values, or as it affects particular places such as cities in environments that matter to people and where they live, work, and play.
- ▶ **Defining and Sharing a Sense of Place.** Studies of the sense of place developed in human geography, urban studies, environmental pedagogy and literacy, and literary studies are another area where insights developed by these Environmental Humanities are contributing to a more sustainable society. As Wallace Stegner writes, “Sense of Place is the kind of knowing that involves the senses, the memory, the history of a family or a tribe; the knowledge of place that transcends single generations and looks to the future.” The analysis of what social, aesthetic, and formal qualities make places meaningful has reshaped urban planning and revealed values in rural landscapes and folkways that preserve environmental quality, biodiversity, and community. How, by sharing our sense of place within a supportive community, can we enhance stakeholder engagement and connect what we know—both intuitively and through organized study—with what we care about deeply? What we know about a place connects us to it and provides motivation to protect it. Connection also leads to knowledge of not just *where* we are but *who* we are. We reflect on our own sense of place through memory, share this with one another, and build a communal sense of place that can serve as the basis for future action. Fostering a sense of place unites communities.⁶⁹ Sweden is a particularly rich location for such work.

3.5 Mistra and the Environmental Humanities

In Swedish educational institutions, as in the other Nordic countries, there is a requirement called “den tredje uppgiften” (the third mission) which has to do with the application of educational research to the needs of the broader community. It should be noted here, as we consider increased support for the Environmental Humanities, that humanists are poised to communicate with the public in especially effective ways, due to training in critical analysis, argument, broad cultural and historical knowledge, communication, and artistic and performative representation (fine arts and theater). Natural and social scientists establish important information about environmental degradation through their research, but humanists have experience in the fields that have traditionally had the greatest impact on the way people perceive and discuss both the environment and threats to the environment. Swedish humanists are accustomed to a role as public intellectuals; they are cultural journalists, lecturers in public forums, and artistic performers and exhibitors. The language and images people use to describe the natural world come largely out of humanist discourse.

To cite just one prominent example, in 1906–1907 Selma Lagerlöf published the two volumes of *Nils Holgerssons underbara resa genom Sverige* (The Wonderful Adventures of Nils), originally conceived as a geography textbook for Swedish chil-

⁶⁹ James Rodger Fleming and Erin Love, “Healthy Lakes and Vibrant Economies: Linking History, Sense of Place and Watershed Protection in the Belgrade Lakes Region,” *Maine Policy Review* (Winter/ Spring 2012): 90–94.

dren. In this book, a mischievous boy given to taunting and torturing animals is shrunk down to a size that allows the animals to give him a taste of his own medicine. He takes to the back of a goose to follow a flock of migrating geese from the southern tip of Sweden to Lapland, a journey that allows him to observe Sweden both from an aerial point of view and, when they land, a nearly microscopic perspective. This creative device permits Lagerlöf to give her readers an overview of the Swedish landscape, adding in botany, geology, and cultural geography lessons as Nils goes along. Ultimately the book sends the strong message that human beings have a responsibility to nurture animals rather than torture them (not unlike the English novel *Black Beauty*, equally important to the British animal rights movement). Lagerlöf manages to slip in lessons about agriculture, water management, depopulation, women and the environment as well. There are very few Swedes who are unacquainted with this book, and images from Nils Holgersson can be found on the Swedish twenty-crown note. Ideas about the Swedish landscape, its flora, fauna, and geological formation – all have been filtered through Lagerlöf’s novel for several generations of Swedes. The study of this book has moved from its original position in geography to a more literary setting. Understanding attitudes toward nation and nature at the turn of the century, the development of a national environmental consciousness, animal rights, gender and the environment, the role of Biblical interpretation in the formation of environmental consciousness: all of these can be gleaned through a humanist study and critique of Lagerlöf’s text. And this is just one example. In Sweden humanist discourse has had a strong impact on the public consciousness and dialogue on environmental issues, if we think of the popular reception of the work of Linnaeus as writer and thinker, the strong focus on nature in the works of such canonical authors as Strindberg (who wrote entire non-fictional volumes on Swedish nature), and the environmental interest and activism promoted by such prominent literary figures as Astrid Lindgren, Harry Martinson, Tomas Tranströmer, and Kerstin Ekman. Understanding and communicating the importance of literature and art as well as history and philosophy in the evolution of environmental thinking and policy is a significant enterprise, one that has a strong resonance with the Swedish public and one that is worthy of support.

With this tradition in mind, it is clear that while the term The Environmental Humanities is new, the concern with the place of human beings in the natural world and the interest in environmental issues are not. These concerns speak to the very essence of Swedish identity. At a moment when all human beings confront major changes due to a variety of scientific and technical factors – such as genetic engineering, species extinction, climate change, and new energy forms – the need for both investigations and public discussion in this area seems indisputable.

Mistra has considerable freedom to work at the cutting edge of environmental research and social needs. Its programs have supported basic research on Arctic futures, on global climate mitigation, on sustainable development in the fashion industry, on sustainable stewardship of foundation funds, on biotechnology and the future food supply, and on better communication of the benefits of research to society.⁷⁰ The Environmental Humanities can enhance each of these programs, and not simply because humanists have strong communication skills. The process is not merely one in which science discovers, industry applies, and the humanities explain to the public what is going on. Rather, scholars working in the Environmental Humanities are posing fundamentally different questions, questions of value and meaning informed by nuanced historical understanding of the cultures that frame environmental problems. Humanists investigate the imaginative dimensions of adapting to changing environments and they describe the cultural work required to mitigate degraded ecological systems.⁷¹ They evaluate new creative forms of

⁷⁰ MISTRA Annual Review, 2011.

⁷¹ <http://climatesofmigration.org/about/documents/>

expression and social organization, such as social media, GIS mapping, and crowd-sourcing of data collection.⁷²

Overall, the interdisciplinary environmental humanities are helping to create a more integrated understanding of how human beings have shaped and will continue to shape the biosphere in the Anthropocene. Given proper support, the Environmental Humanities can leverage intellectual venture capital into a practical and large return on investment, addressing issues of interest and relevance to the public and private sector, including museums, art galleries, and other cultural institutions. This would be of interest to city planners, regional and national policy makers, and innovative industries.

Mistra initiates new programs gradually and incrementally, based on the judgment of the Board, who look for proposals that promise to address cutting-edge and strategic issues. Its programs concentrate efforts on research centers or research areas with international impact, including projects and programs that span the boundaries between disciplines. They establish networks or other forms of collaboration, including international research exchange programs. As a Nordic network for environmental studies has existed for several years, a Mistra grant could catalyze Swedish leadership to make this network more widespread and permanent. By funding Swedish environmental humanities research on the cultural and historical groundings of food, water, and energy systems, for example, Mistra would effectively address major knowledge gaps that will otherwise undermine sustainability goals.⁷³

Mistra also promotes training and recruitment of researchers, which would be the primary human capital for the Environmental Humanities. Mistra can do this by establishing one or more research centers in close association with universities and colleges. A clear opportunity exists to develop the Environmental Humanities in association with Swedish universities. As part of this effort, Mistra can encourage mobility of researchers both across international borders and between universities/colleges, institutes and companies.

In the case of the Environmental Humanities, there are opportunities to develop collaborations between academic institutions and the wider society (as described in 3.3–3.4). If the Mistra Board decides to support this emerging field, with its broad implications for interdisciplinary research, international leadership, and public communication on sustainability, it would appear most effective to support collaboration across the disciplines. This has the potential to open up new channels of communication, to enhance public understanding regarding sustainability, and to redefine cutting-edge issues. Such a program will launch Sweden into greater world prominence and potential leadership in this field.

A program on Environmental Humanities will signal Mistra's commitment to support *all disciplines*, including the humanities, as international players in environmental and sustainability conversations, in academic, public, and policy circles. To cite Gro Harlem Brundtland on the issue of interdisciplinarity: "Current environmental problems require that we move beyond compartmentalization to draw the very best of our intellectual resources from *every field* of endeavor."⁷⁴ One cannot "lead with ideas" if some ideas are excluded or overlooked.

An Environmental Humanities program will reach not only scholars but also sectors of the public who have been little engaged in sustainability issues, and it has

⁷² <http://christensenlab.net/research/current/>, <http://envhist.wisc.edu/index.shtml>

⁷³ These are also goals articulated as key to the mission of scientific research (and arguably, the Environmental Humanities in particular), by the United Nations Environment Program and the European Commission's new Horizon 2020 framework. http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=europe-2020

⁷⁴ Gro Harlem Brundtland, the Prime Minister of Norway, gained international recognition for chairing the World Commission of Environment and Development, which issued the report, "Our Common Future," in 1987, and for articulating the principle of sustainable development. This led to the Earth Summit in Rio in 1992.

the potential to reframe important issues for all citizens. Gaining the attention of a larger public than it has engaged in the past is appropriate as part of the effort to move Sweden as a whole toward sustainable growth.

4 Implementation

4.1 The Concerns of Researchers

Academic areas that have existed for more than a generation usually have an institutional identity and a clear location. In contrast, the Environmental Humanities are an emerging field without a clear departmental affiliation. Its scholars can be found in departments of philosophy, literature, geography, history, anthropology, and the fine arts, as well as interdisciplinary programs such as gender studies, STS, or American Studies. These scholars come to the Environmental Humanities with many different intellectual traditions, each with its own terminology and historical trajectory, and one cannot take for granted that these specialists know one another or that they will immediately find areas of common interest. The clear need when beginning to fund such a field is not only for large projects that benefit a few researchers and one or two centers, but also for activities that encourage scholars to come together for seminars, lectures, and small conferences that provide the opportunity to build a community in Environmental Humanities. From such a community will come new ideas that result from cross-disciplinary conversations. Some of the best research ideas will likely emerge from collaborations between scholars who at present scarcely know one another and who approach a common subject from quite different perspectives. Initial funding, therefore, should support meetings and new connections. The resulting dialogue will likely lead to reconceptions of old problems and the discovery of entirely new topics for study in areas that lie at the margins of any one field of study.

With these general observations in mind, consider the practice of the Environmental Humanities Research in Sweden. It is rich, multi-faceted, and in many cases functioning at a very high intellectual level, but it is also scattered throughout the country, sometimes in institutions not recognizable as humanist entities, often in small subsets of larger projects. The Working Group has polled a broad cross-section of researchers for their ideas on how Environmental Humanities might be further developed and supported in Sweden, and received impassioned and sometimes conflicting responses. Looking over the field from a bird's eye level, however, some larger patterns become clear, and these can help us imagine how to overcome surface differences in order to develop a strong, visible, productive research platform for the Environmental Humanities. Such a platform could attract innovative and significant research and in the process help reshape the notion of humanistic research enhancing its relevance to some pressing contemporary issues.

One commonality among researchers in the Environmental Humanities is a strong focus on interdisciplinarity and a desire to reformulate what is meant by “humanities.” At many Swedish universities, the term “humanities” is used to describe projects within disciplines that elsewhere are imagined as social sciences: anthropology, geography, archeology, and so on. In fact, the idea of a general reformulation of traditional academic disciplines is one of the hallmarks of existing research centers that offer Environmental Humanities as a focus. Linköping’s “Posthumanities Hub” brings that paradigm front and center: they are specifical-

ly oriented toward redefining what is meant by “humanities.” Their website states that they mean to “expand the relevance and scope of the critical humanities.” Similarly, the Umeå Studies in Science, Technology and Environment, while “formally designated as a strong field of research within the Faculty of Arts,” combines humanities, social sciences, and natural sciences within its interdisciplinary projects. The most comprehensive network in the field is the Nordic Network for Interdisciplinary Environmental Studies. Likewise the new initiative at the Royal Institute of Technology (KTH) in Stockholm is defined as interdisciplinary. To be sure, some researchers have institutional appointments in traditional departments (such as Comparative Literature or English), but their research in the Environmental Humanities usually takes place as part of an interdisciplinary research group (such as Uppsala’s Mind and Nature Node or the national gender research group).

One of the researchers polled offered this insight on the question of defining Environmental Humanities: “The big problem is how we draw a boundary between humanities and the social sciences. ‘Culture,’ for instance, is a concept that is used just as frequently in both areas. [...] Can/should humanities and social sciences be separated? Among the engines for human environmental change there are many ‘cultural’ factors such as customs, preferences, identity, power relations, world views, theories of knowledge, and so on that are studied by intellectual historians, philosophers, ethnographers, theologians, archeologists, and literary scholars (all humanists), but also by anthropologists, sociologists, cultural geographers, human ecologists and psychologists (who belong to the social sciences faculty).” He concludes that, “Human Sciences’ is therefore a better category than ‘Humanities.’” In contrast, at American universities, the distinction drawn between humanist and social scientific disciplines looks quite different, a fact that in and of itself seems relevant. For instance, geographers and ethnographers are usually ranged under the category of social scientists, while anthropologists can be divided between social sciences, natural sciences, and humanities. Gender and women’s studies exist in both humanities and social sciences. Arbitrary factors such as department size can in some cases determine whether History has its home in a humanities or social science division (the History department at the University of California, Berkeley counts as a social science, mostly because it was considered excessive to house both English and History in humanities). History often counts as a social science in the United States, while in Sweden, the researchers we consulted seemed to view history as a humanities discipline.

This clearly poses an important problem for the formulation of an Environmental Humanities focus. The definition of “humanities” might well be expanded to include not only the possibility for interdisciplinary work (since nearly all work defining itself as “Environmental Humanities” in Sweden is interdisciplinary), but also a redefinition of what constitutes “humanist” discourse. Sverker Sörlin of KTH has written extensively and persuasively on precisely this topic, and the conference held by NIES in Sigtuna in 2011 took up the issue of defining Environmental Humanities for the future. This redefinition could have exciting implications for both the practice of research in the humanities generally and for environmental studies in particular.

Yet while this interdisciplinary blurring of old academic rigidities is beneficial, it is also vital to uphold the methods of study and analysis developed in literature, philosophy, history, language, and the arts. Many researchers working in these areas are searching for a foothold in the Environmental Humanities. As we surveyed existing university programs and even major national projects billed as “interdisciplinary environmental research,” one pattern that emerged was a limiting simplification of “interdisciplinary” in many cases to technical collaborations between natural sciences and policy-oriented social sciences. This unfortunate narrowing of knowledge has occurred even as funding agencies repeatedly identify environmental problems as of a fundamentally human origin. At the same time,

the Working Group notes that there is already a strong practice of environmental studies within the Swedish social sciences and a growing humanities involvement in Swedish environmental studies. As one of the researchers from Umeå wrote: “above all we feel positively about Mistra’s consideration of a special investment in the Humanities, an area Mistra has always declared to be important, but has almost always been overshadowed by other fields.” Similar sentiments were voiced by researchers from Uppsala and from Örebro. This “overshadowing” seems apparent when one examines the array of research projects that focus on aspects of Environmental Humanities and sees the relative dearth of aesthetic questions. The emerging reorientation of the humanities and the blurring of traditional lines of demarcation are to be encouraged, but they should not lead to the humanities to abandon its subject matter or its tools of analysis. Making sure that there is support for analyses of aesthetics (including the practice of art and performance), narratives, landscapes, ethics, and history within an environmental humanities context seems vitally important, not least because such critical interpretive work is embedded in the practices of everyday life. Major environmental problems result from human behaviors, as individuals and societies seek their version of a good life. At the center of environmental studies are aesthetic, moral, and qualitative questions as well as quantitative analysis and technical innovation. It is worth investing in environmental research by experts trained to frame and investigate questions of value.

4.2 A Swedish Environmental Humanities Consortium

As outlined above, Sweden is privileged to have an array of dedicated and talented scholars already working in the Environmental Humanities. Since they are spread out across the country from Lund to Umeå, it was the general consensus of the scholars polled for this report that there is a need for a national research center or platform for the Environmental Humanities in Sweden. The best option, given funding expectations, would be to establish a national center housed at one university, but funded in such a way that it remains accessible to all Swedish faculty in the Environmental Humanities. Such a center would encourage collaboration among scholars and the development of research in the Environmental Humanities at a number of institutions.

The director of the Consortium must be a highly regarded humanist scholar who helps to provide an international profile, and ideally should have demonstrated expertise in more than one field in the Environmental Humanities. The clear need is for a person whose wide interests and openness to many areas of research will encourage interdisciplinary work. Universities that seek to house the Consortium should put forward a likely director from their faculty as part of their application to Mistra. In addition to overseeing research, the director would also be expected to develop short courses for a research school (*forskarskola*) for students drawn from throughout Sweden.

The consortium would be administered at one university, but it would have an executive board with members chosen from at least three other universities and several stakeholder institutions. The center’s board’s role is to ensure that the contract with Mistra is upheld, to approve calls for projects and ensure they are properly evaluated, and to oversee the work of the director. He, in turn, is to direct *forskarskola* teaching, establish and monitor a list of affiliated scholars from Swedish universities and international partner institutions, and to oversee the research activities from scholars in residence. Through the use of a dedicated website, listserves, and other social media, affiliated scholars and doctoral students are to be apprised of seminars, conferences, calls for papers, lectures and other events. Scholars from participating universities who have grants or sabbaticals could be given office space and access to Consortium resources, thereby becoming part of the on-site working group. Indeed, a possible cost-effective model for funding could

include matching grants, in which any researcher willing to take a sabbatical or bring other grant funding to the center would be eligible for an additional amount of up to the cost of one semester additional leave time.

All PhD students deemed to be in the Environmental Humanities, regardless of university affiliation, would be provided travel funding and free access to lectures, seminars, and the *forskarskola* courses held at the center. It also would invite scholars of international reputation to come for periods of time ranging from a few days to a semester. Such an institution could become the focal point for short courses held in conjunction with doctoral education. Measures should be taken to ensure that the host institution did not dominate its intellectual agenda or monopolize its resources. In particular, the contract between Mistra and the institution should set clear targets for national participation from scholars and for a broad variety of topics in the Environmental Humanities that represent the strengths across disciplines and institutions. Such a center would provide incentives and opportunities to scholars from all the Swedish universities, from doctoral students to faculty at various stages of their careers. It could sponsor an annual lecture series, ideally with a special Mistra lecture or artistic performance each semester, given by a distinguished visiting scholar or artist. This would enhance the visibility of the Environmental Humanities and encourage the community of scholars to meet regularly, and such lectures could also be presented as public events, opening doors to the general populace for importance consideration of environmental issues.

It should be noted here that humanities scholars do not work according to the same models or expectations as scholars in the natural and social sciences; humanists tend to develop and complete individual works rather than collaborative research projects, and while they can profit enormously from intellectual exchange with other scholars, their institutions tend to give credit primarily for single-author monographs and articles. Thus the aim of the Environmental Humanities consortium would be to run along parallel tracks, offering both opportunities for collaborative projects and support for individual scholarship. The center would give scholars space and time for conversations with one another, development of conferences and lecture series, collaboration on graduate seminars and other teaching projects, as well as space, time, and resources for individual research.

We recommend the formation of a consortium within a university because past experience shows that separate organizations with temporary project funding follow a familiar boom and bust cycle. The perils are illustrated by the fate of Denmark's Center for Man and Nature, founded by the Danish research councils from 1992–1997 to support faculty and graduate students from diverse fields. Between 15 and 20 scholars were housed in their own complex, near a university but not integrated into any of its faculties. The center also had funding for guest speakers and several large conferences each year. More than 100 research papers and books were published by members of this group. Leading scholars from other nations came to give lectures, and by 1996 the Center for Man and Nature was becoming well known—just as its funding cycle came to an end.

When the Center closed, the scholars scattered. Excellent work had been done, and in that sense the funding was not wasted. But the Center had not become an institutionalized part of the Danish academic landscape. Within a few years, the specialists had returned to their home disciplines. Mistra can take this example as an object lesson about the necessity for a strong institutional affiliation for a national research center. Indeed, the Mistra charter clearly calls for “Research centers or research areas in close association with universities and colleges,” and this, rather than a stand-alone center, is clearly a wise course.

The Swedish researchers consulted for the writing of this report, while unanimous in their opinion that Mistra should support the Environmental Humanities, had varying ideas about where and what precisely Mistra should support. There seemed to be widespread agreement that a traditional humanities department

would not make the best host institution, though a fear was expressed by some that humanist disciplines such as literature and the arts might be sidelined in strongly interdisciplinary settings. Opinions about the best placement for a center diverged. Some of the existing research centers have demonstrated clear strengths in attracting funding, pulling in researchers from various disciplines, from diverse parts of the country and from other nations. Researchers at these institutions are eager to be involved with a Mistra-funded research group in the Environmental Humanities.

This leads to the question of whether Mistra ought to support an already existing center, with the idea that it would be transformed into a national platform and develop projects with a stronger humanities emphasis. It is one model that some institutions seem ready to try. It would have the advantage that some of the infrastructure, including building space and staff support, already exists. One might be able to allocate a percentage of an existing faculty appointment to the individual chosen to act as the center's director, and the university involved might be able to offer matching support or support going forward. If this model is chosen, it should be made clear to all involved that the initiative is to support a *national* network, and that the representation of humanist disciplines should be central, broad, and inclusive. This might help spread costs more equitably and accommodate scholars located far away from some of the centers for Environmental Humanities. However, we do not find this to be the best solution, because a permanent department that has achieved a high profile seldom wishes to change its identity or mission. Rather, it will usually seek to swallow a new initiative and refocus its intended mission to fit its preexisting self-definition and goals.

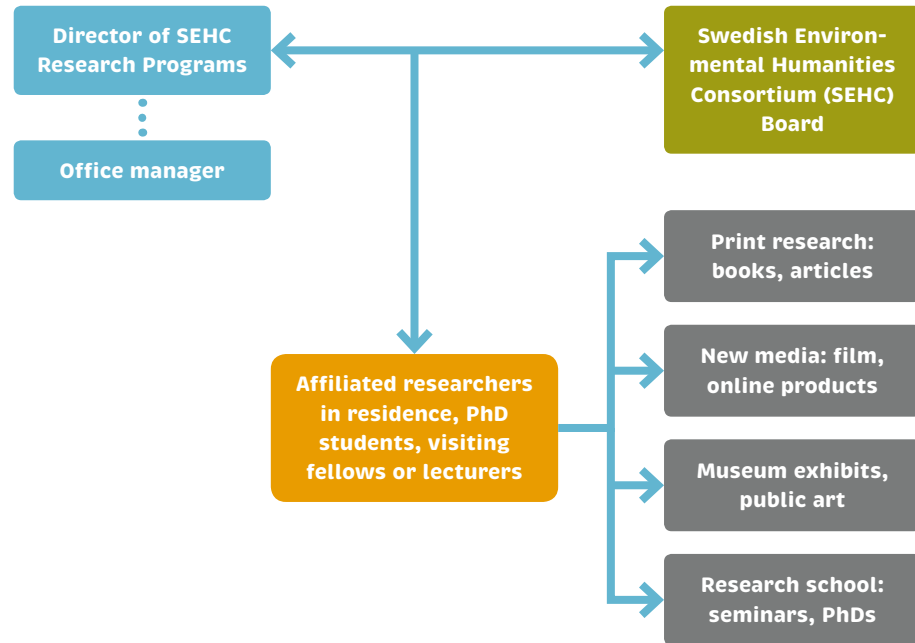
Another question to consider is the best distribution of funds. The director should have a paid position, quite possibly coming in the form of release time from her or his ordinary academic duties. Initially, the position as academic administrator need not be more than half-time in our estimation. This individual will require staff support as well, though again, it may not be necessary to have a full-time staff person, and the institution housing the consortium might provide that support. The members of the advisory board would not be salaried, though they could be recompensed for travel to meetings. The majority of the funds would be required for faculty, graduate student, and post-doc support, both for research and travel. Invitations to guest lecturers from abroad and the organization of conferences would be additional important targets for funding.

Alternatively, Mistra might wish to take a more cautious and less costly course of action that fosters the Environmental Humanities at a number of centers to a modest degree while focusing on other goals as set forth in its charter. For example, it calls for the "Establishment of networks or more permanent forms of collaboration nationally and internationally, including establishment of an international researcher exchange program." This directive points to collaboration and exchange between existing groups, rather than focusing funding in one location. Such a strategy would help to find and develop talent, while building international links between researchers. It could encourage several universities to invest in the Environmental Humanities. Yet spreading the funding widely, although appealing in terms of maintaining equality of opportunity between regions, will correspondingly weaken the effect. Should Mistra decide to adopt this option, it might best do so as a temporary measure, during a gestation period before moving forward to a more focused national center.

To conclude, the Working Group strongly recommends establishment of a consortium for the Environmental Humanities, administered under a contract with one institution, but accessible to and providing grant opportunities for faculty and advanced students from all of the Swedish universities. The consortium should be conceived as offering opportunities for individual research as well as collaborative projects, a gathering place for the lively exchange of ideas, a destination for foreign scholars, and a site for doctoral research. A center of this kind would reflect a real-

ity that has remained virtually unnoticed until now: that Sweden boasts a strong contingent of humanists dedicated to research on the environment. These scholars, once assembled and working together, will be better able to speak to the present environmental crisis and better able to transmit their findings with the broader public. As researchers, humanists work with the forms of communication most familiar to and beloved by humans generally: language and the arts. In this way, Environmental Humanists have an important role to play in the formation of perceptions and policy. A Swedish Environmental Humanities Consortium would give them a setting where that role could be nurtured.

FIGURE 2. An organizational model for a Swedish Environmental Humanities Consortium



The Director of Research Programs should be a faculty member from the host institution, ideally one with broad interests in the Environmental Humanities rather than a more narrow disciplinary focus. This position might be funded as part-time. The Office Manager would handle logistics and event organizing, likely with part-time administrative staff or students.

SEHC Board comprised of scientific representatives from at least three disciplines and institutions in addition to stakeholders. Board advises and approves project design and calls for visiting researchers in residence (Swedish affiliates or visiting fellows). The Board would also promote and advise on the development of PhD training, public outreach (exhibits), and collaborations.

Affiliated Swedish researchers would be in residence to complete articles, books, and joint projects leading to public outreach to solve environmental problems. Visiting scholars would be invited on limited terms, participating in mentoring PhD students and internationalizing research activity.

The SEHC would produce several types of research in line with the mandate: address environmental problems in high-impact ways by engaging society at large.

5 Conclusions and Recommendations

The committee is optimistic about the future of the Environmental Humanities in Sweden and concludes the following:

- ▶ The Environmental Humanities is an emergent, interdisciplinary field at leading universities, primarily in the English- and German-speaking world, that would be further enriched by Swedish involvement.
- ▶ This is an opportune moment for investment in the Environmental Humanities, in order to bridge a wide range of disciplines and to build a larger scholarly community concerned with Mistra's central concerns, as expressed in its charter.
- ▶ Even without focused institutional support, Swedish scholars in the Environmental Humanities have developed relevant international ties to universities and cultural institutions in Germany, Australia, Britain, and the United States. There is a foundation to build upon, and good ideas in abundance, with clusters of scholars at KTH, Lund, Umea, and Uppsala, as well as smaller groups elsewhere.
- ▶ Nordic networking became more self-conscious in this field with the creation of The Nordic Interdisciplinary Environmental Studies network, founded in Oslo in 2006. It has forged ties between scholars in Iceland, Denmark, Norway, Finland, and Sweden, and since 2009 has stepped up its activities due to a NordForsk grant, administered in Sweden.
- ▶ Some excellent scholars distributed among several Swedish universities are presently engaged in the Environmental Humanities, but they do not yet constitute a strongly articulated, self-conscious group who have a primary identification with the field. In this sense, the funding challenge is fundamentally different from that of providing support for a long-established discipline, such as biology, philosophy, or physics. The need is to help a new interdisciplinary field achieve definition and recognition.
- ▶ If Mistra acts soon, Swedish scholars will retain the advantage of first movers. They will more easily forge links to leading international centers than will be possible in a few years, when the Environmental Humanities are more fully developed and many international alliances are cemented. In 2013, global research initiatives that do not include Sweden are being launched in the Environmental Humanities, notably by the Mellon Foundation.
- ▶ Institutionalization for such a new field is important. It should be anchored within existing research structures in order to provide long-term support. To foster a community of scholars, Mistra will need to decide whether it wants decentralized stimulation of work at several universities or concentration at one center.
- ▶ Funding ideally should be directed not only to doctoral and post-doctoral students, but also to international exchange students and tenured faculty.

- ▶ A modest investment to bring leading international scholars for an annual Mistra lecture in the Environmental Humanities will return large dividends both in terms of linking Swedish work to a wider intellectual community and giving Swedish scholars the chance to test their work against the best international scholarship.
- ▶ In the longer term, Sweden (or perhaps the Nordic countries together) will have to decide whether to support a major research center in the Environmental Humanities such as those recently established in Australia, Canada, China, Germany, Great Britain, and the United States.
- ▶ Research in the Environmental Humanities has great potential for reaching a broad public audience and can participate in the vital “third mission” of Swedish academic institutions by encouraging critical discourse on environmental issues within existing public cultural institutions.

Taking all these matters into consideration, this Working Group recommends that Mistra support a national Swedish consortium in the Environmental Humanities. Our knowledge of leading worldwide centers indicates that an investment over four years of 8 million SEK per annum could move Swedish research into the first rank. One university would have an administrative role (receiving one third of funds), with a governing board that includes outside stakeholders (distributing two-thirds of the funds for research). This ratio will both strengthen the host institution and forge links between scholars from the participating universities, and in this way it will build Sweden’s broad capacity to become a leader in this field. To encourage wide participation and maximize interdisciplinarity, it would be best not to merge the Consortium into an existing department. To serve the diverse needs of Swedish scholars in the Environmental Humanities it will need function with considerable autonomy.

6 Appendices

6.1 Examples of works in the Environmental Humanities

- Abram, D. (1997). *The Spell of the Sensuous: Perception and Language in a More-than-Human World*, Vintage.
- Alaimo, S. (2010). *Bodily Natures: Science, Environment, and the Material Self*, Indiana University Press.
- Bennett, J. (2009). *Vibrant Matter: A Political Ecology of Things*, Duke University Press.
- Buell, L. (1995). *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*, Harvard University Press.
- Carruth, A. (2013). *Global Appetites: American Power and the Literature of Food*, Cambridge University Press.
- Chakrabarty, D. (2009). *The Climate of History: Four Theses*, *Critical Inquiry* 35, p. 197–222.
- Conway, J. K., Kenneth K., Leo M., eds (1999). *Earth, Air, Fire, Water*, University of Massachusetts Press.
- Cronon, W., ed. (1996). *Uncommon Ground: Rethinking the Human Place in Nature*, Norton.
- Derrida, J. (2008). *The Animal that Therefore I Am*, Fordham University Press.
- Fleming, J. (2010). *Fixing the Sky: The checkered history of weather and climate control*, Columbia University Press.
- Haraway, D. (2003). *The Companion Species Manifesto*, Prickly Paradigm Press.
- Heise, U. (2008). *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*, Oxford University Press.
- Langston, N. (2010). *Toxic Bodies*, Yale University Press.
- McNeill, J. (2000). *Something New Under the Sun: An Environmental History of the Twentieth Century World*, Norton.
- Morton, Timothy (2007). *Ecology without Nature*, Harvard University Press.
- Nixon, R. (2011). *Slow Violence and the Environmentalism of the Poor*, Harvard University Press.
- Nye, D. E. (2003). *America as Second Creation*, MIT Press.
- Robin, L. (2008). *The Eco-humanities as literature: a new genre?*, *Australian Literary Studies* 23, p. 290–304.
- Rose, D. B., et al (2012). *Thinking Through the Environment, Unsettling the Humanities*, *Environmental Humanities* 1, p. 1–5, <http://environmentalhumanities.org/archives/vol1>
- Sörlin, S. (2012). *Environmental Humanities: Why Should Biologists Interested in the Environment Take the Humanities Seriously?*, *BioScience* 62, p. 788–789.
- Wolfe, C. (2003). *Animal Rites: American Culture, the Discourse of Species, and the Posthumanist Theory*, University of Chicago Press.

6.2 Journals in the Environmental Humanities

Many journals have published articles in the environmental humanities, so it is difficult to make a comprehensive list. The sampling below focuses on journals primarily devoted to the field.

Antipode: A Radical Journal of Geography (Wiley). Edited By: Wendy Lerner, Paul Chatterton, Vinay Gidwani, Nik Heynen, Katherine McKittrick and Sharad Chari, Editorial Office Manager, Andrew Kent (antipode@live.co.uk).

Australasian Journal of Ecocriticism and Cultural Ecology. Dr. C.A. Cranston, University of Tasmania, SEJEL, Locked Bag 1340B, Newnham Campus, Launceston 7250, Australia. Phone: (03) 63 318672, e-mail: CA.Cranston@utas.edu.au

Ecozon@. Carmen Flys Junquera, Editor, Colegio de Trinitarios, Instituto Franklin, C/Trinidad 1, 28801 Alcalá de Henares, Madrid (Spain). E-mail: info@ecozona.eu

Environmental Communication: A Journal of Nature and Culture.
www.tandfonline.com/renc

Environmental Humanities. School of Humanities, Level 3, Morven Brown Building, University of New South Wales, NSW 2052, Australia

Environmental History (Oxford Journals). Editor: Nancy Langston, University of Wisconsin, Madison. E-mail: nelangst@wisc.edu

Environment and History. Department of Geography, School for Environmental Sciences, Roxby Building, University of Liverpool, LIVERPOOL L69 7ZT, UK. E-mail: Mark.Riley@liverpool.ac.uk

Global Environment: A Journal of History and the Natural and Social Sciences, Mauro Agnoletti, University of Florence, Via San Bonaventura 13, 50145 Firenze, Italy. E-mail: mauro.agnoletti@unifi.it

The Goose, The Association for Literature, Environment, and Culture in Canada / Association pour la littérature, l'environnement et la culture au Canada (ALECC). E-mail: lsszabo@alecc.ca

Humanimalia, DePauw University, USA

Interdisciplinary Studies in Literature and the Environment, Tom J. Hillard, Book Review Editor, Book Review Editor, ISLE: Interdisciplinary Studies in Literature and Environment, Boise State University, 1910 University Dr., Boise, ID83725-1525, USA

Journal for Critical Animal Studies, Brock University, Canada

Landscape Journal, Department of Landscape Architecture, University of Minnesota, 144 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455. E-mail: ljournal@umn.edu

Landscapes, Graham Fairclough, Newcastle University, UK (e-mail: graham.fairclough@ncl.ac.uk), Paul Stamper, English Heritage, UK (e-mail: Paul.Stamper@english-heritage.org.uk), Maney Publishing, 1 Carlton House Terrace, London SW1Y 5AF, UK

Planning Perspectives, Florian Urban, Mackintosh School of Architecture, Glasgow School of Art, 167 Renfrew Street, Glasgow G3 6RQ, UK. E-mail: f.urban@gsa.ac.uk

Technology and Culture, University of Oklahoma, 332 Cate Center Drive, Room 484 Norman, OK 73019, 1.405-325.2076. E-mail: techculture@ou.edu

6.3 Participants at the Mistra Workshop 18 January 2013

Committee

David E Nye, University of Southern Denmark (chair)

Linda Haverty Rugg, University of California, Berkeley, USA

James R Fleming, Colby College, USA

Robert Emmett, The Rachel Carson Center, Ludwig-Maximilians-Universität,
Munich

Mistra

Johan Edman

Malin Lindgren

Invited participants who were able to attend

| Name | Affiliation | Contact |
|---------------------|---|---|
| Lena Christensen | American Literature, Lund University | http://www.lucus.lu.se/html/lena_christensen.aspx |
| Steven Hartman | American Literature, Royal Institute of Technology (KTH) | http://www.kth.se/abe/om-skolan/organisation/inst/philhist/2.3231/personal/steven-hartman-1.345916 |
| Alf Hornborg | Human Ecology, Lund University | http://www.hek.lu.se/kontakt/hornborg-alf |
| Finn Arne Jørgensen | History of Science and Ideas, Umeå University | http://www.idesam.umu.se/english/about/staff/history-of-science-and-ideas/finn-arne-jorgensen/?languageId=1 |
| Karl-Johan Lindholm | Archaeology and Ancient History, Uppsala University | http://www.arkeologi.uu.se/Research/Presentations/Karl-Johan_Lindholm/ |
| Christian Munthe | Practical Philosophy, University of Gothenburg | http://www.gu.se/english/about_the_university/staff/?userId=4083#tabContentAnchor1 |
| Ulrika Olausson | Environmental Communi- cation, Örebro University | http://www.oru.se/English/Schools/School-of-Humanities-Education-and-Social-Sciences/PersonalPages/Ulrika-Olausson/ |
| Anders Persson | No information | No information |
| Johannes Persson | Theoretical Philosophy, Lund University | http://www.lucus.lu.se/lep/html/johannes_persson.html |
| Per Sandin | Bioethics and Environmental Ethics, Swedish University of Agricultural Sciences | http://www.slu.se/persandin |
| Anna Storm | History of Science and Tech- nology Södertörn University | http://webappl.web.sh.se/p3/ext/content.nsf/aget?openagent&key=sh_personal_profil_en_168147 |
| Sverker Sörlin | Environmental History, Royal Institute of Technology (KTH) | http://www.kth.se/en/abe/om-skolan/organisation/inst/philhist/2.3231/personal/sverker-sorlin-1.38487 |
| Nina Wormbs | History of Technology, Royal Institute of Technology (KTH) | http://www.kth.se/en/abe/om-skolan/organisation/inst/philhist/2.3231/personal/nina-wormbs-1.29081 |

Invited, not able to attend

| Name | Affiliation | Contact |
|-------------------|---|---|
| Gunnel Cederlöf | History, Uppsala University | http://katalog.uu.se/empInfo/?languageId=1&id=N96-5729 |
| Anneli Ekblom | Archaeology and Ancient History, Uppsala University | http://www.arkeologi.uu.se/Research/Presentations/Anneli_Ekblom/ |
| Christer Nordlund | History of Science and Ideas, Umeå University | http://www.idesam.umu.se/english/about/staff/history-of-science-and-ideas/christer-nordlund/ |
| Erland Mårald | History of Science and Ideas, Umeå University | http://www.idesam.umu.se/english/about/staff/history-of-science-and-ideas/erland-marald/ |

Other researchers/organizations in the Environmental Humanities in Sweden

| Name | Affiliation | Contact |
|---|---|---|
| NIES – Nordic Network for Interdisciplinary Environmental Studies | Royal Institute of Technology (KTH) | http://www.kth.se/abe/om-skolan/organisation/inst/philhist/2.3231/Forskning/nies2 |
| CSD Uppsala – The Uppsala Centre for Sustainable Development | Uppsala University & Swedish University of Agricultural Sciences | http://www.csduppsala.uu.se/ |
| SRC – Stockholm Resilience Centre | Stockholm University | http://www.stockholmresilience.org/ |
| Eva Friman | Earth Sciences/CSD, Uppsala University | http://katalog.uu.se/empInfo/?languageId=1&id=N5-338 |
| Gloria Gallardo | Earth Sciences/CSD, Uppsala University | http://katalog.uu.se/empInfo/?id=AA138 |
| Paul Sinclair | Archaeology and Ancient History, Uppsala University | http://www.arkeologi.uu.se/Research/Presentations/Paul_Sinclair/ |
| Christian Isendahl | Archaeology and Ancient History, Uppsala University | http://www.arkeologi.uu.se/Research/Presentations/Christian_Isendahl/ |
| Carole Crumley | Anthropology, Swedish University of Agricultural Sciences | http://www.slu.se/en/about-slu/search/search-employee/person-presentation/?emp=4A014F4FAD66D14CC234FA4E2854554E |
| Nancy Langston | History of Science and Ideas, Umeå University | http://www.umu.se/sok/english/staff-directory/view-person?uid=nala0017&guise=anst1 |
| Dolly Jörgensen | Ecology and Environmental Science, Umeå University | http://www.emg.umu.se/english/about-the-department/staff/jorgensen-dolly/ |
| Björn-Ola Linnér | Water and Environmental Studies, Linköping University | http://www.tema.liu.se/tema-v/medarbetare/linner-bjorn-ola?l=en |
| Johan Hedrén | Water and Environmental Studies, Linköping University | http://www.tema.liu.se/tema-v/medarbetare/hedrn-johan?l=sv |
| Sofie Storbjörk | Water and Environmental Studies, Linköping University | http://www.tema.liu.se/tema-v/medarbetare/sofie-storbjork?l=en |
| Rolf Lidskog | Environmental Sociology etc, Örebro University | http://www.oru.se/humus/rolf_lidskog |
| Dag Avango | History, Royal Institute of Technology (KTH) | http://researchprojects.kth.se/index.php/pb_134/pb.html |
| Peder Roberts | History, Royal Institute of Technology (KTH) | http://www.kth.se/en/abe/om-skolan/organisation/inst/philhist/2.3231/personal/peder-roberts-1.363328 |
| Sabine Höhler | Science and Technology Studies, Royal Institute of Technology (KTH) | http://www.kth.se/en/abe/om-skolan/organisation/inst/philhist/2.3231/personal/sabine-hohler-1.194362 |

During the last decade a new field has emerged that increasingly is referred to as the Environmental Humanities. This report will locate that development historically, intellectually, and geographically, and will assess to what degree and how the field might be encouraged and supported in Sweden.

In 2012 the Mistra Board established a Working Group on the Environmental Humanities in order to decide whether or not the Foundation should invest in this field. This working group was chaired by Professor David E. Nye (University of Southern Denmark) and included Professor Linda Rugg (University of California, Berkeley), Professor James Fleming (Colby College), and Dr. Robert Emmett, (Director of Academic Programs at the Rachel Carson Center, University of Munich).

