



The Environmental Humanities

Sigtuna, Sweden 14-19 October 2011

Organized by



The Nordic Network for Interdisciplinary Environmental Studies Division of the History of Science and Technology KTH Royal Institute of Technology



In partnership with Sigtunastiftelsen and Uppsala University







NIES Research Symposium V

The Environmental Humanities: Cultural Perspectives on Nature and the Environment

Sigtuna 14-16 October 2011

A Nordic Researcher Training Course

Advancing Theory and Method in the Environmental Humanities

Sigtuna 14-19 October 2011

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Organizing Committee

Steven Hartman Chair of NIES

Division of the History of Science and Technology

KTH Royal Institute of Technology

Research Fellow in American Literature

Department of English Uppsala University

Anna Storm Postdoctoral Research Fellow

Centre for Baltic and East European Studies

Södertörn University

Sverker Sörlin Professor of Environmental History

Division of the History of Science and Technology

KTH Royal Institute of Technology

Susanna Lidström NIES Assistant

Division of the History of Science and Technology

KTH Royal Institute of Technology

PhD candidate

Department of English

King's College, University of London

The Environmental Humanities: Cultural Perspectives on Nature and the Environment

NIES Research Symposium V The Sigtuna Foundation* 14–16 October 2011

FRIDAY 14 OCTOBER / RESEARCH SYMPOSIUM

9.00-10.10	Registration and Coffee
10.10-10.15	Welcome: Sofia af Geijerstam, The Sigtuna Foundation
10.15-10.30	Introduction to Day 1: Steven Hartman (KTH Royal Institute of Technology & Uppsala University)
10.30-12.00	SESSION 1: Discussion of Papers Chair: Anna-Maria Jönsson (Södertörn University) Jenny Beckman (Stockholm Resilience Centre), "Biodiversity as Species Protection: ArtDatabanken and its Histories"; Respondent: Christopher Oscarson (Brigham Young University) Anna Tunlid (Lund University), "Framing of Biodiversity in Swedish Environmental Policy"; Respondent: Porvarður Árnason (University of Iceland)
12.00-13.10	Lunch
13.10-14.20	PLENARY LECTURE A: David Nye (University of Southern Denmark, Odense), A History of American Energy Regimes and Prospects for Sustainability
14.20-14.30	Short Break

^{*} From Friday through Sunday all symposium sessions, except for meals and coffee breaks, take place in the Main Hall (*Stora salen*), The Sigtuna Foundation. RTC participants should consult the RTC program for any extra course sessions scheduled during the weekend.

SESSION 2: Discussion of Papers 14.30-16.00

Chair: Anna Storm (Södertörn University)

Porvarður Árnason (University of Iceland), "Global Climate Change – Up Close and Personal"; Respondent: Maunu Häyrynen (University of Turku)

Sigurd Bergmann (Norwegian University of Science and Technology), "Sacred Geography: religion in the lived space of climatic change";

Respondent: Martin Hultman (Linköping University)

Coffee Break 16.00-16.30

SESSION 3: Discussion of Papers 16.30-18.00

Chair: Anna Samuelsson (Uppsala University)

Per Gyberg & Jonas Anshelm (Linköping University), "The Swedish

and the Discourse of Industrial Fatalism";

Respondent: Amanda Lagerkvist (Södertörn University)

Alf Hornborg (Lund University), "Fetishism, Dissociation, and the Cultural Foundations of Capitalism"; Respondent: Eva Friman

(Uppsala University/SLU)

Short Break 18.00-18.20

18.20-19.30 PLENARY LECTURE B: Kenneth Olwig

> (SLU Swedish University of Agricultural Sciences, Alnarp), A Masque of Blackness: Aether, CO and "Global" Warming

in Millennial Perspective

Dinner 19.30-21.00

SATURDAY 15 OCTOBER / RESEARCH SYMPOSIUM

8.30-8.45	Welcome: Leadership of the School of Architecture and the Built Environment, KTH Royal Institute of Technology
8.30-8.45	Introduction to Day 2: Anna Storm (Södertörn University)
8.45-11.00	Chair: Steven Hartman (KTH Royal Institute of Technology & Uppsala University) Peter Mortensen (Aarhus University), "Returning to Nature by Way of Asia: green orientalism in Jack Kerouac and Aldous Huxley"; Respondent: Mark Luccarelli (University of Oslo) Lena Christensen (Lund University), "Frankenstein and the Arctic"; Respondent: Hannes Bergthaller (National Chung-Hsing University, Taiwan) Henrik Otterberg (Chalmers Technical University), "The Ersatz Animal: a zoöntological reading of Philip K. Dick's 'Do Androids Dream of Electric Sheep?'"; Respondent: Steven Hartman (KTH Royal Institute of Technology & Uppsala University)
11.00-11.30	Coffee Break
11.30-12.40	SESSION 5: Roundtable Discussion Topic: Humanistically Framed Environmental Research and the Challenges of Inter-/Multi-/Trans- disciplinarity Moderating Contributor: Steven Hartman (KTH Royal Institute of Technology / Uppsala University) Panel: Carole Crumley (Stockholm Resilience Centre), Jonas Ebbesson (Stockholm University / Stockholm Resilience Centre), Heather Goodall (University of Technology, Sydney), Libby Robin (KTH Royal Institute of Technology) and Sverker Sörlin (KTH Royal Institute of Technology)
12.40-14.00	Lunch
14.00-15.10	PLENARY LECTURE C: Greg Garrard (Bath-Spa University), Ferality Tales: the Cultural Construction and Reconstruction of the Conceptual Boundary of Wild/Domestic Animals

Coffee Break 15.10-15.45 **SESSION 6:** Discussion of Papers 15.45-17.15 Chair: Karin Syse (University of Oslo) Per Sandin (SLU Swedish University of Agricultural Sciences), "Environmental Ethics and Bioethics as Humanistic Disciplines"; Respondent: Henrik Otterberg (Chalmers Technical University) Christer Nordlund, Erland Mårald, Örjan Kardell and Anna Lindkvist (Umeå University), "What are Classical Humanistic Scholars Doing in the Forest?: a historical project about forests, forestry and forest science"; Respondent: Gunnel Cederlöf (Uppsala University) Break 17.15-17.30 17.30-18.40 PLENARY LECTURE D: Richard Norgaard (University of California, Berkeley), Ecosystem Services: the Making of a Metaphor We Live(?) by 18.40-19.00 Break Reception 19.00-19.30 **Banquet Dinner** 19.30-22.00 Cash Bar 22:00-

SUNDAY 16 OCTOBER / RESEARCH SYMPOSIUM

9.00-9.15	Welcome: Jan Lindegren, Dean of the Faculty of Arts, Uppsala University
9.15-9.30	Introduction to Day 3: Sverker Sörlin (KTH Royal Institute of Technology)
9.30-11.45	Chair: Mark Luccarelli (University of Oslo) Finn Arne Jørgensen (Umeå University), "The Infrastructure of Nature: leisure cabins and the built environment in Norway, 1850-2000"; Respondent: Anna Storm (Södertörn University) Gunnel Cederlöf (Uppsala University), Boundaries, "Polities and the Making of a Citizen: the establishment of colonial rule in Northern East Bengal"; Respondent: Heather Goodall (University of Technology, Sydney) Annika Nilsson (Stockholm Environment Institute), "Framing and Reframing of Biodiversity in International Governance: implications for the science-policy debate"; Respondent: Axel Goodbody (University of Bath)
11.45-14.00	Lunch + longer break for symposium-only participants
14.00-15.10	PLENARY LECTURE E: Paul Sinclair (Uppsala University), Toward an Integrated History to Guide the Future
15.10-15.20	Short Break
15.20-16.30	PLENARY LECTURE F: <i>Libby Robin</i> (KTH Royal Institute of Technology), <i>Thinking about Places</i> : the Humanities and Managing Nature
16.30-17.00	Coffee Break
17.00-18.10	PLENARY LECTURE G: Carole Crumley (Stockholm Resilience Centre), An Holistic Anthropology: Joining together Environmental Humanities with Contemporary Social Science
18.10-18.20	Short Break

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18.20-19.20 SESSION 8: Concluding Roundtable Discussion

Topic: Looking Back over the Program and Ahead toward to the Future of the

Environmental Humanities

Participatory Moderator: Anna Storm (Södertörn University)

Panel: Steven Hartman (Uppsala University/KTH), Mark Luccarelli

(University of Oslo), David Nye (University of Southern Denmark) and

Kate Soper (London Metropolitan University)

19.20-19.30 Closing Remarks: Steven Hartman

19.30-21.00 Dinner

Nordic Researcher Training Course on

Advancing Theory and Method in the Environmental Humanities

Sigtuna 14-19 October 2011

FRIDAY 14 OCTOBER / NORDIC RESEARCHER TRAINING COURSE

9.00-10.10	Registration and Coffee	
10.10-10.15	Welcome: Sofia af Geijerstam, The Sigtuna Foundation	
10.15-10.30	Introduction to Day 1: Steven Hartman	
10.30-12.00	Symposium Session 1: Discussion of Papers (see symposium program for details)	
12.00-13.10	Lunch	
13.10-14.20	RTC / Symposium Plenary Lecture A: David Nye	
14.30-16.00	Symposium Session 2: Discussion of Papers (see symposium program for details)	
16.00-16.20	Coffee Break	
16.20-18.20	RTC workshops 1a & 1b: (1a) Axel Goodbody (in Toleransen) (1b) Maunu Häyrynen (in Tacksamheten)	
18.20-19.30	RTC / Symposium Plenary Lecture B: Kenneth Olwig	
19.30-21.00	Dinner	

RTC participants are welcome to attend symposium paper sessions that are not in conflict with RTC workshops (optional)

SATURDAY 15 OCTOBER / NORDIC RESEARCHER TRAINING COURSE

8.30-8.45	Introduction to Day 2: Anna Storm (Södertörn University)
8.45-11.00	Symposium Session 4: Discussion of Papers (see symposium program for details)
11.30-12.40	Symposium Session 5: Roundtable Discussion (see symposium program for details)
12.40-14.00	Lunch
14.00-15.10	RTC / Symposium Plenary Lecture C: Greg Garrard
15.10-15.30/45	Coffee Break
15.30-17.00	RTC Brainstorming Session (optional session: details TBA*)
15.45-17.15	Symposium Session 6: Discussion of Papers (see symposium program for details)
17.30-18.40	RTC / Symposium Plenary Lecture D: Richard Norgaard
19.00-19.30	Reception
19.30-22.00	Banquet Dinner

RTC participants are welcome to attend symposium paper sessions that are not in conflict with RTC workshops (optional)

SUNDAY 16 OCTOBER / NORDIC RESEARCHER TRAINING COURSE

9.00-9.15	Welcome: <i>Jan Lindegren</i> , Dean of the Faculty of Arts, Uppsala University
9.15-9.30	Introduction to Day 3: Sverker Sörlin, KTH Royal Institute of Technology
9.30-11.45	Session 7: Discussion of Papers (see symposium program for details)
11.45-14.00	RTC (lunch) workshop 2: Richard Norgaard (in Framtiden)
14.00-15.10	RTC / Symposium Plenary Lecture E: Paul Sinclair
15.10-15.20	Short Break
15.20-16.30	RTC / Symposium Plenary Lecture F: Libby Robin
16.30-17.00	Coffee Break
17.00-18.10	RTC / Symposium Plenary Lecture G: Carole Crumley
18.10-18.20	Short Break
18.20-19.20	Symposium Session 8: Roundtable Discussion (see symposium program for details)
19.30-21.00	Dinner

RTC participants are welcome to attend symposium paper sessions that are not in conflict with RTC workshops (optional) $\,$

MONDAY 17 OCTOBER / NORDIC RESEARCHER TRAINING COURSE

8.15-8.30	Welcome to the RTC-only part of the program: Steven Hartman	
8.30-10.30	RTC Workshops 3a & 3b:	(3a) Heather Goodall (in Framtiden) (3b) Karl-Johan Lindholm (in Toleransen)
10.30-11.00	Coffee Break	
11.00-12.15	RTC Plenary Lecture H: Kate Soper	
12.15-13.30	Lunch	
13.30-15.30	RTC Workshops 4a & 4b:	(4a) Kate Soper (in Framtiden)(4b) Friman & Gallardo (in Toleransen)
15.30-16.00	Coffee Break	
16.00-18.00	RTC Workshops 5a & 5b:	(5a) Mark Luccarelli (in Framtiden)(5b) Peter Mortensen (in Toleransen)
19.15-21.00	Dinner	

TUESDAY 18 OCTOBER / NORDIC RESEARCHER TRAINING COURSE

10.00-12.00	RTC Workshops 7a & 7b:	(7a) Christopher Oscarson (in Toleransen) (7b) Finn Arne Jørgensen (in Framtiden)
12.00-13.15	Lunch	
13.15-16.15	RTC Workshops 6a & 6b:	(6a) Sörlin & Robin (in Framtiden)(6b) Karen Syse (in Toleransen)
16.15-17.00	Coffee Break	
17.00-18.15	Research Writing Workshop (optional session: details $TBA^*)$	
19.15-21.00	Dinner	

 $[\]ref{eq:continuous}$ Details on this session will be posted on the NIES website approximately one week ahead of the session.

WEDNESDAY 19 OCTOBER / NORDIC RESEARCHER TRAINING COURSE

Workshops 8a & 8b: (8a) **Hannes Bergthaller** (in Framtiden) 9.30-11.30 (8b) **Dolly Jørgensen** (in Toleransen) Lunch 11.30-13.00 Workshops 9a & 9b: (9a) **Greg Garrard** (in Framtiden) 13.00-15.00 (9b) **Eren Zink** (in Toleransen) Coffee Break 15.00-15.30 Workshop 10: **Thorvardur Arnason** (in Framtiden) 15.30-17.30 Closing Remarks on the RTC: **Steven Hartman** (in Framtiden) 17.30-17.45 18.00-20.00 Dinner





Symposium / RTC Plenary Lectures

LECTURE A, 14 October, 13.00-14.15, main hall / stora salen **David Nye**, University of Southern Denmark, Odense

A History of American Energy Regimes and Prospects for Sustainability

What do the stages of US energy history (from muscle power in the seventeenth century to the present) suggest about the prospects and problems for reducing CO_2 emissions by adopting new technologies? This lecture will analyze this question as both a problem of technological momentum and one of energy regime change. It will also be framed by comparisons to energy consumption in the emerging BRIC economies and the EU. This talk can be seen as an additional final chapter to my *Consuming Power* (1998).

LECTURE B, 14 October, 18.15-19.30, main hall / stora salen **Kenneth Olwig**, SLU Swedish University of Agricultural Sciences, Alnarp

A Masque of Blackness: Aether, CO₂ and "Global" Warming in Millennial Perspective

On 12th night 1605 the poet Ben Jonson and the architect and stage designer Inigo Jones staged "The Masque of Blackness" for the royal court of King James I. This was not only probably the first time perspective was used on the "British" stage, and an early example of the use of the word landscape to refer to spatial scenery, it also was a very early conflation of the meaning of landscape with that of nature. It presented a global vision of landscape and climate in which "aether" was seen to drive imagined "climate refuges" from Africa to Europe. Using discourse analysis it will be shown how this theater piece represented a carefully worked out staging and performance of the idea that social policy, environment and climate change are interlinked, and that nations form a social, racial and natural unity. It will be argued that "aether," as a global medium, played much the same role in this early modern discourse as "space" does today with regard to discourses concerning the circulation of an invisible form of carbon, and the heating and blackening of the earth. Key words: Global warming, aether, space, landscape, nature, modernity, millennialism.

LECTURE C, 15 October, 14.00-15.10, main hall / stora salen

Greg Garrard, Bath-Spa University

Ferality Tales: the Cultural Construction and Reconstruction of the Conceptual Boundary
of Wild/Domestic Animals

Ferality – the condition in which animals exist in between the wild and domesticated spheres – is a liminal situation that has different meaning and significance for ecocriti-

cism and for animal studies. In environmental terms, ferality is an unambiguous threat: island biogeography and postcolonial narratives are both replete with examples of the destruction wrought by the cats, pigs, goats and invasive plant species transported across the 'Pangaean seams,' in Alfred Crosby's account, by European colonists. In animal studies, though, ferality represents a standing conceptual challenge to the anthropocentric system of categories that privileges either domestication (as the triumph of mind over nature par excellence) or the 'wild' (as its sublime or reified other). At the same time, the crudely zoomorphic representation of abjected humans - such as the rioters and looters of the English riots of August 2011 – as 'feral' reveals the coimbrication of concepts of human nature and animality, and the necessity of subjecting both to chiasmic critique. As a first step, this paper proposes that the human/animal dyad be broken up into multiple, highly specified relationships, such as the coevolutionary bond of humans and dogs. This combination is of especial interest because, unlike many domesticated species (cows, cannabis, cats) the original wild species still exists. Indeed, according to some species concepts, Canis familiaris and Canis lupus are a single species, within which the wild wolf is, in some parts of the world, legally protected, while the feral dog is persecuted. As a first approximation, then, the human/animal dyad can - without even starting to reconsider the human - be respecified as a complex human/(dog/wolf) conceptual and moral triad. Texts I might discuss include Jack London's The Call of the Wild, Alistair McLeod's As Birds Bring Forth the Sun, Jill Paton Walsh's Knowledge of Angels, Eva Hornung's Dog Boy and Wild Dogs by Helen Humphreys.

LECTURE D, 15 October, 17.30-18.45, main hall / stora salen **Richard Norgaard**, University of California, Berkeley Ecosystem Services: The Making of a Metaphor to Live(?) by

Ecology has multiple models and perspectives for understanding the interrelationships between species across space and time. Over the past several decades, however, the metaphors of nature as capital and ecosystems as providing services arose as a way to portray the importance of nature. Increasingly environmental and ecological economists as well as conservation biologists began to treat the metaphor as a working tool, as a way of thinking about the management of nature. From there, conservation and development agencies picked up and initiated programs to conserve nature by commodifying, in some cases literally, the services of nature. This development has resulted in ecosystems getting more attention than ever before in dominant institutions and has resulted in the development of consulting services to provide advice for communities, land management agencies, and development institutions. There is only one problem, or perhaps two or three. Among ecologists' many models of how to understand ecosystems, few are amenable to the ecosystem service and natural capital metaphor. Those models that are amenable do not necessarily give consistent answers. Most importantly, limiting ecosystem thinking to models compatible with the metaphors leaves other ways of understanding ecosystems out of the process. It is quite likely that the science of ecology, or at least that applied

to management, policy, and politics, will be clipped and contorted, much as economic understanding was distorted by the demand on economists to provide simple answers to government agencies and political discourse half a century earlier.

LECTURE E, 16 October, 13.15-14.30, main hall / stora salen Paul Sinclair, Uppsala University Toward an Integrated History to Guide the Future

Many contemporary societal challenges manifest themselves in the domain of human environment interactions. There is a growing recognition that responses to these challenges formulated within current disciplinary boundaries, in isolation from their wider contexts, cannot adequately address them. This lecture will outline the need for an integrated, trans-disciplinary synthesis that allows for a holistic approach, and, above all, a much longer time perspective. I will outline both the need for, and the fundamental characteristics of, what I call "integrated history." This approach promises to yield new understandings of the relationship between the past, present and possible futures of our integrated human-environment system. The lecture recommends a unique new focus of our historical efforts on the future, rather than the past, concentrated on learning about future possibilities from history. A growing worldwide community of trans-disciplinary scholars is forming around building this Integrated History and future of People on Earth (IHOPE). Building integrated models of past human societies and their interactions with their environments yields new insights into those interactions and can help to create a more sustainable and desirable future. The activity has become a major focus within the global change community.

LECTURE F, 16 October, 14.45-16.00, main hall / stora salen
Libby Robin, KTH Royal Institute of Technology
Managing the Nature and Culture of Place: Adding Expertise from the Humanities

Land management is a multi-faceted enterprise, involving professionals, locals and other 'experts' who contribute to understanding the culture or nature of place. Local, national and international interests also drive decision making. In this paper I take four aspects of conservation management initiatives: Place, Landscape, Biodiversity and Livelihood, and compare environmental management case studies from Australia, Scandinavia and England. Despite very different scales of management and cultural traditions, there are commonalities, particularly about who should be the expert in the case of managing the future of the natural world. Such commonalities reflect 'global' forces that reshape the environmental management of local places on the ground. The paper considers the value of art, history and the broader humanities in enriching and critiquing global scientific and management ideals and in empowering local agency.



LECTURE G, 16 October, 16.30-17.45, main hall / stora salen Carole Crumley, Stockholm Resilience Centre

An Holistic Anthropology: Joining together Environmental Humanities with Contemporary Social Science

Contemporary American anthropology, unlike its European counterpart, has many and varied roots, including but not limited to linguistics, the earth sciences (geology, biology, physical geography), literature, philosophy, classics, religion, the arts, and history. I explore these various strands with regard to what they offer the emergent field of environmental humanities, and propose collaboration that could unify social scientists and humanists (both within and across these divisions). This alliance is not meant to collapse valuable diverse approaches, but to answer scientists who claim that these fields can be ignored in the search for a viable human future.

LECTURE H*, 17 October, 11.00-12.15, main hall / stora salen
Kate Soper, London Metropolitan University

The Humanities and the Environment: Contradiction, Crisis and the Politics of Prosperity

The Humanities have long been applauded (and their study justified) for their development of ethical awareness, critical autonomy and cultural self-realisation. But this understanding of personal development and social value is at odds with the vocationalist and instrumental conceptions that have come to dominate in the work-world. There is, in short, a disjuncture between the professed ethical ideals of liberal capitalist societies, and the principles of their economic governance. This lecture will reflect on the history of the tensions between the intrinsic values associated with the Humanities and the instrumental rationality that prevails in the so-called 'real' world of the economy, with especial focus on the contradictory forms these acquire in modern democratic society, and on the impasse to which they have led in our own most recent, neo-liberal and post-modern, times.

To highlight these ongoing contradictions, it will be argued, is to direct attention to a larger set of questions about what it is that highly developed societies, faced as they now are with unprecedented environmental and economic problems, should be doing with their productive capacity. Here it will be argued that the Humanities can help to keep open a debate about the nature of prosperity and human well-being – and that their input will be essential to any transition to a more sustainable and rewarding future. In exploring these ideas, the lecture will draw on my current research on 'alternative hedonism' and its response to environmental crisis, where I have been emphasising the sensual and spiritual pleasures of escaping the consumerist model of the 'good life' and calling for a cultural revolution in thinking about work and time-expenditure as the necessary first stage in building a mandate for a sustainable socio-economic order. The Humanities should not, in this context, be charged with a directly political agenda. But they can contribute much needed dialectical insights on consumption, desire and the aesthetics of material culture.

^{*} RTC-only lecture

Symposium Paper Abstracts*

Jonas Anshelm and Per Gyberg, Linköping University

Den svenska klimatpolitiska debatten och den industriella fatalismens diskurs

Syftet med artikeln är att analysera den i Sverige dominerande diskursen mellan hösten 2006 och slutet av 2009, dvs under den intensiva och viktiga perioden mellan Sternrapporten och COP15. Här används Becks begrepp industriell fatalism för att förstå de klimatpolitiska föreställningsramar som upprättades under dessa klimatlarmens år framför andra. I centrum för analysen står regeringsrepresentanters, näringslivsorganisationers, fackföreningsföreträdares, ekonomkårens och storstadens politiska ledarskribenters meningsskapande. Frågor om teknikens, vetenskapens, politikens, marknadens, regelverkens och konsumtionens roll ägnas särskilt intresse, liksom berättelsen om Sverige som klimatpolitiskt föredöme. Det empiriska underlaget utgörs framför allt av den stora mängd artiklar om klimatförändringar och klimatåtgärder som publicerades i svenska dagstidningar och tidskrifter under den aktuella perioden. Metodologiskt avser vi att närläs varje enskild text för att identifiera dess huvudsakliga meningsinnehåll. På så vis kommer vissa innebörder att framstå som centrala, medan andra uppfattas som perifera eller till och med frånvarande.

The Swedish Political Debate on Climate Change and the Discourse of Industrial Fatalism

The aim of this study is to analyze the dominating discourse of Swedish climate politics between the autumn of 2006 and the end of 2009, i.e. the tense period between the publication of the Stern-report and COP15. An analytical point of departure is the theory of reflexive modernity advocated by Ulrich Beck. His concept of industrial fatalism is used to explain the frames of climate politics that were constructed during these years of climate alarms. The empirical material investigated consists mainly of a large number of debate articles on climate change and climate mitigation published in Swedish newspapers and journals during the period. Methodologically close readings of all these texts are employed in order to identify their central meanings and rhetorical figures. The coding process has led to the identification of different patterns and meaning relations which together form different discourses. The most dominant of these discourses is called "the discourse of industrial fatalism"

Listed alphabetically by authors' surnames – for paper session times please see the symposium program.

Porvarður Árnason, University of Iceland

Global Climate Change - Up Close and Personal

Glacier recession is often seen as the "canary in the coalmine" of global climate change. The world's glaciated areas are undergoing large-scale and rapid change and provide probably the most obvious evidence of the reality of global warming. Glaciers, however, by their very nature, tend to be situated in remote and sparsely populated areas and the changes happening to them are thus far removed from the everyday experiences of most human beings. To convey information about these changes, communicators rely on visual representations, either direct (photographs and videos) or manufactured (e.g. maps and computer simulations). Through such transformations, however, the "solid" physical evidence of glacial recession risks becoming a mere abstraction and is perhaps thus ineffectual in communicating to others the reality of global warming. In this paper I engage with such issues based on my personal experiences from the past 3-4 years of documenting glacial recession in Southeast Iceland.

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Jenny Beckman, Stockholm Resilience Centre

Biodiversity as Species Protection: the Swedish Species Information Centre and its histories

The Swedish Species Information Centre was established in 1984, as a joint effort by several institutions: directed by the Swedish University of Agricultural Sciences and the newly hatched Swedish Environmental Protection Agency, funded by non-governmental organisations such as the World Wide Fund for Nature (itself only recently established in Sweden). This combination of academic, governmental, and non-governmental organisations is not unique in nature conservation – environmental historian Lars J. Lundgren has dubbed it "the green triangle." Depending on the perspective, the history of the SSIC can be presented as a result of the development of international environmental governance, of the reorganisation of specifically Swedish government agencies, of intra-academic power struggles, or of a long tradition of amateur naturalist activity. This paper examines the multiple histories of the SSIC and species protection as a way of exploring the coproduction of biodiversity science, institutions, and practices.

Sigurd Bergmann, Norwegian University of Science and Technology

Sacred Geography: religion in the lived space of climatic change

Global climate change represents one of the most demanding challenges to humanity; in recognition, climate impact science has developed towards one of the most successful interdisciplinary research fields. Nevertheless, current scientific, political and public discussions are largely shaped by the limits of contemporary mechanistic and economy-



oriented worldviews while neglecting the deeper human and cultural dimensions. This contribution locates itself in the recent research that puts the vulnerability of people to the fore, and thereby it enters an alternative interdisciplinary path by exploring religion as a microcosm of the human and cultural dimension of climate change.

Hereby the paper's point of departure is the context of increasing water scarcity at the slopes of Mt Kilimanjaro in Tanzania where the melting glacier functions as a central symbol of the impact of global warming in Africa, on the one hand, and where traditional local systems of water irrigation are in radical change with regard to farming, ritual and belief processes on the other hand.

Gunnel Cederlöf, Uppsala University

Climate, Commerce and Bureaucracy: founding colonial rule in northern East Bengal

The late eighteenth to the early nineteenth century saw a dramatic reconfiguration of power and political relations in the lands of northern East Bengal towards the Burmese border. Having been granted revenue rights of the former Mughal territories, the mercantile trading corporation the British East India Company strove to achieve de facto sovereign control by military and bureaucratic means. As a result, not only the old Mughal lands but also the neighbouring kingdoms came under EIC direct and indirect governance. But intent and practice were not easily reconciled. This presentation explores the almost insuperable social-structural and climatic barriers that marked the first half century of British supremacy in the region. Being a monsoon landscape, there was a tense relationship between a fluid, continuously changing landscape and the EIC's fixed notions of boundaries, revenue classes, and governance. Climatic conditions, administrative practices and commercial interests had a decisive effect on polity and subject formation.

Lena Christensen, Lund University

Frankenstein and the Arctic

The Arctic offers a tremendous 'cultural service' by its real and symbolic ability to visualize the effects of climate change. In Mary Shelley's *Frankenstein* the Arctic is the place where Dr. Frankenstein meets his fate: this is where the final battle with his creation, the Creature, plays out. It is symbolically the place where Enlightenment rational Man meets his fate. Shelley wrote *Frankenstein* in the summer of 1816 at the dawn of the Industrial Revolution. Almost two centuries later, the Arctic is again the central stage for a battle between humanity and its self-created adversary, this time embodied in the effects of the increase of anthropogenic CO in the atmosphere. It is thus not surprising that so many responses to climate change employ the Arctic as the key symbol. In this context I explore *Frankenstein* in relation to contemporary discourses that link the Arctic with politics and aesthetics.

Alf Hornborg, Lund University

Behärska eller behärskas av föremål: Fetischism, dissociation och kapitalismens kulturteori

Det har föreslagits att föreställningen om naturen som objekt, väsensskild från samhälleliga relationer, blev grundläggande för moderniteten. Genom att överge ömsesidigt förpliktande (s.k. "relationella") kunskapsteorier som animism kunde moderna människor utveckla nya och mindre lyhörda former av naturumgänge. Objektivism kan således betraktas som en typ av dissociation. Förhållningssättet har möjliggjort rovdrift på naturresurser, som i sin tur har väckt fåfänga förhoppningar om miljöetik. Samtidigt har objektivismen lagt grunden för de moderna versioner av fetischism som enligt Karl Marx är kännetecknande för kapitalism. När relationer mellan människor omvandlas i föremål som pengar, varor och teknik blir de otillgängliga för politisk kritik. Utöver människans kontroll över den objektiverade naturen är den s.k. cartesianska dualismen därför även knuten till objektvärldens kontroll över människan. Paradoxalt nog motsvaras den moderna människans strävan att behärska föremålen omkring henne av föremålens tilltagande makt över människan. Hennes dissociation från människor och miljö utanför hennes synfält upprätthåller illusionen att ekonomi och teknik är moraliskt neutrala företeelser, och mystifierar det nära släktskapet mellan kapitalism och slaveri, teknik och magi samt konsumtion och kannibalism. Resonemanget illustreras med en rad empiriska exempel som sträcker sig från Amazonindianers animism och fornandinska ritualer till textilfabriker och ludditer i det tidiga 1800-talets England

Fetishism, Dissociation, and the Cultural Foundations of Capitalism

The perception of nature as an object, distinct from social relations, has been fundamental to modernity. In abandoning animism modern people were able to develop new and less sensitive forms of human-environmental relations. Objectivism has facilitated the exploitation of natural resources and simultaneously provided the foundation for the modern forms of fetishism which according to Karl Marx are characteristic of capitalism. When relations between people are transformed into objects such as money, commodities, and technology, they become inaccessible to political critique. The struggle of modern humans to control objects is thus accompanied by an increasing power of objects over humans. The dissociation from other humans and environments beyond their field of vision maintains the illusion that economy and technology are morally neutral phenomena, and mystifies the affinities between capitalism and slavery, technology and magic, and consumption and cannibalism.

Finn Arne Jørgensen, Umeå University

The Infrastructure of Nature: leisure cabins and the built environment in Norway, 1850-2000 Scandinavians like to think of themselves as being particularly close to nature. Identifying exactly what this nature is, however, is tricky. This paper historicizes the making of

Norwegian nature by following the leisure cabin from 1850 until present. Cabins serve as gateways to nature for Norwegians, but have also permanently altered and influenced what we think of as natural. This paper examines how the infrastructures connecting people to cabins and to scenic landscapes have now become an integrated part of the Norwegian landscape. Large parts of Norway's nature cannot be experienced outside of this infrastructure; at the same time, it is precisely through using this infrastructure that Norwegians have come to know and appreciate nature. In conclusion, the paper will argue that sustainable environmental management should consider the history of how we have come to use and experience nature, but not look back to an idea of pristine, untouched nature for solutions

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Peter Mortensen, Aarhus University

Returning to Nature by Way of Asia: green orientalism in Jack Kerouac and Aldous Huxley

Euro-American involvements with the East multiplied and intensified during the countercultural period from the mid-1950s to the early 1970s, which witnessed unprecedented masses of young westerners turning, literally or metaphorically, towards Asia. In this essay I discuss how two powerful discourses – orientalism and environmentalism – were mobilized in two early and influential countercultural novels, namely Jack Kerouac's *The Dharma Bums* (1958) and Aldous Huxley's *Island* (1962). These novels interest me because they critique Western consumerism, while at the same time investing heavily in the humanly and environmentally beneficial potential of certain "eastern" disciplines, techniques and embodied practices. Coupling crisis awareness to certain kinds of cultural mobility and exchange, both Kerouac and Huxley raise the possibility that westerners who orientalize their ways of life in specific ways may find their way back towards a mode of existence more respectful of inner and outer nature.

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Annika Nilsson, Stockholm Environment Institute

Framing and Reframing of Biodiversity in International Governance

Nature protection and sustainable use of biological resources have been on the political agenda for over a century, but the loss of biodiversity is still accelerating. It is thus important to better understand limits and potentials of the architecture of biodiversity governance. This paper analyzes the evolution of international biodiversity governance in order to reveal when and why new ways of framing biodiversity have been established. It notes that the framing of biodiversity has shifted many times and that today's governance architecture features several competing views that link to politically contentious issues such as sovereignty and resource rights. The analysis also shows that arenas for science-policy dialogues have been important for including broader societal concerns in



discussions of conservation, which has made biodiversity governance a leader in identifying issues that have become central to global sustainability governance, including attention to developing country priorities, equity and participation by local stakeholders.

Christer Nordlund, Örjan Kardell, Anna Lindkvist and Erland Mårald, Umeå University

Vad har humanister i skogen att göra? Om ett historievetenskapligt projekt kring skog, skogsbruk och skogsvetenskap

År 2009 inleddes ett stort svenskt skogsforskningsprogram kallat "Future Forests: Sustainable Strategies under Uncerainty and Risk". Det rymmer en rad olika delprojekt, däribland ett med humanistisk profil. Men vad har egentligen humanister i skogen att göra? Vad kan humanistiska perspektiv tillföra den traditionella skogsvetenskapen och den vidare debatten kring skog och miljö? Projektet avser att bidra till en djupare förståelse av de intellektuella och kulturella drivkrafter som ligger bakom dagens situation när det gäller skog och skogsbruk liksom skogsvetenskapen själv. Vi vill ställa frågor som skogsforskare normalt inte ställer, men också ta intryck som bidrar till en breddning av den traditionella historieskrivningen kring skogen. Tanken är att genomföra fallstudier som är relevanta ur både humanistisk, skoglig och miljöpolitisk synvinkel. I den här presentationen kommer vi att diskutera upplägg och resultat av våra första fallstudier men också ge exempel på förväntningar och farhågor som denna typ av grön humanistisk forskning kan medföra.

What are Classical Humanistic Scholars Doing in the Forest?: a historical project about forests, forestry and forest science

In 2009 a big Swedish research program about forests began, called "Future Forests: Sustainable Strategies under Uncertainty and Risk." The program encompasses a number of subprojects, among them one project with a humanistic profile. But what are classical humanistic scholars doing in the forest after all? What contributions could humanistic perspectives bring to traditional forest science and the wider debate about forests and the environment? The project aims to contribute to a deeper understanding of the intellectual and cultural driving forces behind the contemporary situation regarding forests and forestry, along with the forest science itself. We intend to ask questions that forest scientists normally do not raise, but also to stay open for impressions that lead to a broadening of the traditional historical writing about forests. The idea is to carry out case studies, relevant from a classical humanistic perspective as well as from a forest science and environmental policy point of view. In this paper we will discuss the methods of working and the results from our first case studies, but also exemplify the expectations and worries brought about by this kind of green humanistic research.



Henrik Otterberg, Chalmers Technical University

The Ersatz Animal: a zoöntological reading of Philip K. Dick's Do Androids Dream of Electric Sheep? (1968)

Dick's novel Do Androids Dream of Electric Sheep? has been much studied in recent years, but the foci of these studies have tended to bypass an important refrain throughout the book, involving a severely troubled zoöntology. Mirroring the action-based plot tracing bounty-hunter Rick Deckard's "retiring" of humanoid "andys" is a quieter but more insistent theme, stemming from Deckard's increasing difficulty of judging between creature artificiality and reality: namely of necessarily arbiting between the "manufactured" and the ostensibly "created." What then might Dick's novel bring to a topical discussion of zoöntology, and by extension to the environmental humanities? It arguably stages a multilayered critique of the vagaries of human empathy toward creatures similarly organized, yet perceived as lacking in pedigree, self-awareness and/or independent will. To this one should add its foregrounding of a clash between Cartesian instrumentalism and Isidorean compassion in a singularly entropic environment, thoroughly technified while toxically imbued and ecologically denuded.

Per Sandin, SLU Swedish University of Agricultural Sciences

Environmental Ethics and Bioethics as Humanistic Disciplines

Academic ethicists have typically been found in humanistic disciplines such as philosophy or religious studies. In recent years applied ethics has experienced remarkable growth. In this field we find both bioethics and environmental ethics. It appears that bioethics is the most prolific field in terms of professional output such as published papers, taught courses and attraction of research grants. In this paper I reflect upon differences and similarities between these fields. These concern, e.g., the availability of canonical texts and widely accepted normative theory, publication practices, connection to a particular profession, degree of institutionalization, and questioning of paradigm-related assumptions. Some differences reflect ones commonly thought to hold between science and humanities/social sciences. I hypothesize that some differences might explain the apparent success of bioethics compared to environmental ethics. I also ask the question whether in the case of ethics, a humanistic discipline might need to be less humanistic in order to survive.

Anna Tunlid, Lund University

Framing of Biodiversity in Swedish Environmental Policy

Biodiversity has become a key issue in environmental policy, but despite the fact that the concept is widely used there is no common agreement on its definition. In this paper I will analyse how the framing of biodiversity has evolved in the context of Swedish

environmental policy from the late 1980s until today. The paper's point of departure is an acknowledgement that the framing of biodiversity is a dynamic process that builds upon former understandings of nature conservation as well as more recent articulated motives, values and knowledge. The aim of the paper is to explore which aspects of the concept have been selected and made salient in the framing process. I will also discuss how the framing of biodiversity has been linked to other frames, most notably "sustainability" and "climate change" in order to strengthen certain aspects, values and narratives about nature.





RTC Workshops*

Workshop leader: Porvarður Árnason, University of Iceland

Rooting around: searching for the foundations of environmental policy

The quest for a proper ethical (or ethical-aesthetic) foundation for human relations with nature lies at the core of environmental philosophy. Over the past two decades, debates within the field have increasingly centered on the policy implications of different theoretical stances and, indeed, the very relevance of theory for "real world" environmental issues. Meanwhile, back in the "real world," environmental policy has during this same period been advancing in a number of different - and somewhat conflicting - directions which can, by and large, be traced back to the "tripartite" nature of policy initiatives following the Earth Summit in Rio de Janeiro in 1992. Since then the "big three" environmental issues – sustainable development, biodiversity and climate change – have vied for the attention of both policy-makers and the general public alike. These global issues, furthermore, interact with diverse national and local concerns, as well as older international policy standpoints (e.g. nature conservation as formulated by the IUCN or the guidelines for inclusion on UNESCO's World Heritage List), in myriad ways. Recent initiatives, such as the emergence of the European Landscape Convention and the establishment of the Natura 2000/Emerald Network and European/Global Geopark Network, appear to add even more to this confusion about what constitutes a sound basis for environmental policy. In the workshop a brief discussion about the policy-debate within environmental philosophy and its possible "reverberations" in other fields of the environmental humanities will be followed by a critical analysis of the philosophical/ideological foundations of two case studies: IUCN's "new paradigm" and the European Landscape Convention.

Workshop leader: Hannes Bergthaller, National Chung-Hsing University, Taiwan

Economy, Ecology, and Liberal Metaphysics: homeostasis as a foundational trope of modern environmentality

Economy and ecology are not only etymologically cognate; the Greek root ("oikos," household) from which both are derived also points back to a shared genealogy in which these

Listed alphabetically by workshop leaders' surnames—for workshop times please see the RTC program. Advance readings assigned by the lecturers for their respective workshops are not listed in this booklet, nor—where applicable—are practical instructions concerning other required/advised forms of advance preparation for the individual workshops; for a complete list of these preparatory assignments workshop participants should see the RTC packet that was sent out in advance of the conference. In a slightly revised form the packet can also be accessed on the NIES website

(http://www.kth.se/abe/nies).

fields of inquiry were part of a single domain of knowledge, namely that of natural philosophy. They began to assume their modern contours in the 17th and 18th century, when a number of Enlightenment thinkers began to conceptualize both natural and social order as arising from the same underlying principle of self-regulation or homeostasis. Adam Smith's famous "invisible hand" and Carl von Linné's "oeconomy of nature" are two sides of the same coin, two different variants of what I refer to as liberal metaphysics. While awareness of this shared conceptual foundation faded as economy and ecology splintered into separate disciplines in the course of the 19th century, it continued to allow for a kind of metaphorical resonance between the two that was to play a crucial role in the emergence of the modern environmental movement.

This workshop combines approaches from intellectual history and ecocriticism. It will be divided into two parts. The first part will consist of a lecture in which I trace the tradition of liberal metaphysics, as outlined above, from Carl von Linné's treatise "The Oeconomy of Nature" to Aldo Leopold's seminal A Sand County Almanac and sketch out a possible critique of it. In the second part, participants will be asked to deliver a brief statement on the role which concepts of homeostasis play in their respective home discipline, and to reflect on what bearing a better knowledge of the history of these concepts might have on academic practice. These statements, as well as the preceding lecture and the assigned readings, will then provide the basis for a concluding discussion.

Workshop leaders: Eva Friman and Gloria Gallardo, Uppsala University

Interdisciplinary Research and Field Research - Traps to Fall into and to Avoid: a participative training workshop

The workshop will start off with a brief account from the workshop leaders of traps that an interdisciplinary research group can fall in, in terms of ontology, epistemology, theory, purpose, unit of analysis, methodology, planning and preparation, contract writing, and role sharing and ethics in field research. We will then show how the group can discuss, plan and prepare to avoid these traps. The training researchers will then be asked to practice such discussion, planning and preparation. Thus a great many methodological and theoretical issues will be taken up during this workshop, with a focus on communicating one's own approach while also developing a better understanding other approaches, irrespective of particular theoretical or methodological preferences.

Workshop leader: Greg Garrard, Bath-Spa University

Theorising Pollution

The intentions of this workshop are: 1) to introduce the ways in which ecocritical theory characterises pollution and toxicity as cultural and historical problems, over and above their familiar identity as scientific issues; 2) to identify key nonfictional and fictional

texts of interest to the ecocritical student of pollution; 3) to question the relationship between environmentalist rhetorics of purity / danger and the quite different rhetorics of subversion and impurity celebrated in cultural theory, especially queer theory; and 4) To discuss the methodological problems of intensely interdisciplinary study. The format will combine a brief introductory talk and intensive seminar discussion, based upon the set reading but allowing for flexible development according to the interests of participants.

Workshop leader: Heather Goodall, University of Technology, Sydney

Fishing for Words: interdisciplinary research & multiple audiences

Human interactions with the natural environment are not only central to many lives and livelihoods. They can arouse powerful emotions at the same time as they offer invaluable insights into the past and the present. Can research into these interactions be conducted with multiple communities who might have very different perspectives, each held passionately? Can words be found for such multifaceted research? Is it possible to write and publish for a diversity of audiences who may often be in contention and even hold each others' views in contempt?

Fishing is one such interaction which involves many people across all professions, cultures, ethnicities and sexualities. It involves emotions and regulations, traditions and innovations, everyday knowledge and science. Because it is so important to so many different people it offers a fertile arena to understand the complex ways that human beings relate to the wider world and to each other. Yet how can research into this complicated and multifaceted subject be undertaken in an ethical yet rigorous way which does justice to the many perspectives involved? Can such a project treat each view with respect, yet bring an analytical approach which goes beyond any one partisan approach? Can the language and the assumptions of each social and cultural perspective be recognised in the outcomes? Can such research be 'written up' in words and images so that it reaches back to all these audiences?

This workshop will explore one attempt to do this with a research project about fishing on the major inland river system in Australia, the Murray and Darling river system. Here native fish species, vegetation and water quality have all suffered major impacts from agriculture, rising populations and climate change. As the research unfolded, the researchers and subjects included Aboriginal (indigenous) and non-Aboriginal people, men and women, historians and scientists. The outcome needed to be meaningful to everyday readers from all riverine communities as well as to specialists in history and science.

Workshop participants will first be asked to consider and critique this Australian project, which will be introduced by one of the researchers and writers, Heather Goodall, outlining the strategies and dilemmas involved in it. The 'Fishing the Georges River' paper, by Goodall *et al*, will be introduced as a reflection on the theoretical perspectives which can be brought to the quotidian engagements with the 'everyday' environment which are often ignored or marginalised. Finally participants will be asked to discuss how their own research about intersections between the human and non-human world might



be open to such multifaceted research and writing. By the end of the workshop, they will
have trialled and discussed a draft layout for the outcomes of their own work to allow
them to introduce it to many audiences.

Workshop leader: Axel Goodbody, University of Bath

Frame analysis: considering literature in the context of environmental discourse

Social constructivists have argued for some time that environmental problems are not simply 'out there', but - however real they may be - essentially perceptions and interpretations of environmental change. They are communicated in discourses in which they are framed in terms of human values. It has become increasingly recognised that differences of opinion over the solution of environmental problems cannot be satisfactorily resolved without an understanding of these framings and values. The subject of this workshop is Frame Analysis, which draws on linguistic methods, but has developed mainly in Political Theory, Media Studies, Management and Communications Studies. Frame Analysis gives insight into how and by whom change in the environment is linked with values, through metaphors, narratives and images. For literary scholars and researchers in cultural studies, this raises questions including: What part do cultures and languages play in shaping public perceptions of the relative seriousness of particular environmental changes, and of what measures should be adopted to address them? What role do journalists, essayists and fiction writers play in raising public awareness? Should writers be conceived of as 'moral entrepreneurs', experimentally reframing issues in a counter-discourse to that of economists, politicians and scientists?

Workshop leader: Maunu Häyrynen, University of Turku

Landscape as Topic for Screensaver or Background Images on PC Screens or Mobile Phones

The aim is to map out a potential study area. The students are asked to provide in advance their own background images, or images they know are used as background images. These will be collected and printed out for the workshop. They will be studied by simple visual content analysis as instructed, to be followed by discussion on reasons for their choice in the first place and on their functions in their use contexts. There is a significant advance reading component to this workshop involving selection and reading of a single booklength text by students from a preselected group of options. In the discussion part of the workshop the students' arguments are to be somehow related to their chosen reading. Each student will prepare a short interpretation and present it to the group.



What Goes in Must Come out: water pollution and urban metabolism

This workshop will present the concept of urban metabolism and apply that to the flow of water through the city. When water is consumed in various urban activities, which are built upon culture, institutional arrangements, and technologies, outputs are created. These outputs can be put to productive use, such as energy, or become waste that enters the biosphere through bodies or ecologies. This workshop will stress that when we write our academic environmental stories, it is imperative to think about the physical—what happens to the inputs and outputs involved in our human activities matters. After presenting the theoretical basis, the workshop will apply the urban metabolism idea to the medieval city using a plethora of source types, including historic texts, archeological finds, and art. The students will be split up into three smaller groups and given an exercise in which each group will cooperatively analyze a medieval source to determine which pieces of the urban metabolism it says something about and which it leaves out, coming up with possible thesis statements that the source might be used to support. The point of the exercise is not to learn about medieval urban history, but rather to think about how sources can be approached and read with a particular theoretical construct (in this case urban metabolism) in mind. The groups will then come back together to share their findings with the whole workshop.

Workshop leader: Finn Arne Jørgensen, Umeå University

Bringing Technology into the Environmental Humanities

In stories about nature, technology often takes the place of an outside force, threatening what's pristine and authentic about nature. Scholars operating within the broad umbrella of the environmental humanities have increasingly pushed towards more nuanced stories of technology and nature. This workshop aims to challenge the students to rethink the relationship between technology and environment, and to consider what roles technology plays or can play in their own research. Through discussion of case studies and the categories of "nature" and "technology", the workshop will explore the technologically mediated character of human interaction with nature. While we know that we use technology to manipulate nature, the relationship goes even deeper than this: we can't know nature outside of our experience of it, and this experience is intensely technological. Adding technology to these stories lets us realize that environment is never pristine, but rather shaped by human activity in a myriad of ways.



An Archaeology of the Commons: linking the past, the present and the future

Studies on commons and collective use of resources are a vital research field internationally. A strong influence of the Noble Prize Winning Common Pool Resource theory of Elinor Ostrom (1990) can be noted. The general objective of this theory is to understand the emergence of cooperative behaviour in order to develop institutional design principles for sustainable management of natural resources. Current commons research ranges over several disciplines, such as economics, political science, history, anthropology, rural development and systems ecology. Few attempts to apply long-term perspectives on collective forms of natural resource management have been made, although it has been recognised that such perspectives may have an important role to play in shaping adaptation strategies for the future.

The workshop will be introduced by a presentation of an ongoing research project on commons, which brings in an archaeological long-term perspective to current discussions concerned with local livelihoods, natural resource management and rural development. The presentation will be followed by a group discussion aiming to address the future role of commons in the context of natural resource management.

Workshop leader: Mark Luccarelli, University of Oslo

Proto-landscape / Landscape / Post-landscape?

"Concepts like security, risk, intentionality, meaning, cohesion, knowledge, community, landscape, vulnerability and globalization will remain important for any society that wants to deal with crisis and change, and they are all concepts which humanities scholars are unusually prepared to apply to research problems." (NIES V: Environmental Humanities CFP) What is implied by the word landscape and is it a useful concept in environmental studies? Landscape is not only difficult to define, it may be said to be an idea with a life of its own. The workshop highlights some important landscape concepts, with emphasis on writers from the 1970s to the present. In particular we are concerned with the struggle between scientific and representational expressions of landscape. The geographical or cultural landscape concept, which sought to overcome the aesthetic, and specifically "painterly," associations of the term, fully emerged by the 1920s. Despite the undeniable advantages of the man-in-nature epistemology associated with this approach, aesthetically oriented landscape representation resurged after the War and was associated with the beginnings of the contemporary environmental movement in the United States (cf. Ansel Adams). This shows that the idea of a geographical or cultural landscape was not the last word. Interest shifted back to representation: various critical Marxisms critiqued landscape. John Barell's The Idea of Landscape and the Sense of Place (1972) stood as the epitome of these studies; he argued that landscape representation became highly formalized and formulaic, which meant it better reflected the vision of its benefactors than the real meanings of place in people's lives. This critique was followed by broad social criticism

of landscape formation and urban symbolism expressed in the baroque urban landscape regime of post-Renaissance Europe and in contemporary landscapes of power. More recently defining the environmental crisis in global terms, and against place, has helped spawn the concept of a post-landscape or anti-landscape. Cultural criticism succeeded in revealing the relations of power concealed in landscape's pastoral and Hellenistic origins, which has helped to spawn interest in the question of the origin of the landscape idea: origin is found specifically, in the proto-landscape, or, in historical representations of various proto-landscapes, that vary culturally and can shed light on how landscape representation has worked and may work in the future to frame (environmental) politics.

Workshop leader: Peter Mortensen, Aarhus University

Appropriate Technology Then and Now

A loosely organized grassroots movement of the late 1960s and 1970s, "appropriate technology" provided a pragmatic and optimistic counterpoint to deep ecology, wilderness romanticism and declinist technophobia. In this workshop, we will first try to get to grips with AT by analyzing its intellectual underpinnings in writings by R. Buckminster Fuller, Lewis Mumford and E. F. Schumacher, and by exploring its manifestation especially in popular countercultural "access catalogs" like Stewart Brand's *The Whole Earth Catalog* (1968-1980). The workshop will also include a cultural and aesthetic dimension, as we will explore cross-references linking AT discourse to various developments in imaginative art and literature. Last but not least, we will discuss what relevance, if any, this movement holds for our current age of looming climate changes and resource shortages. Raising questions relevant to all environmentalism-related inquiries, this workshop is planned to exemplify and facilitate interchange across disciplinary boundaries. It should be of interest to aspiring environmental humanities researchers in various fields including architecture, art, design, literature, history and philosophy.

Workshop leader: Richard Norgaard, University of California, Berkeley

Science, Society and Nature: a coevolutionary approach

Topics. How did science become the way it is? Why are some technologies adapted, others not? What has determined the ways nature has been transformed? And are not these questions interrelated? Do not the soils we have reflect the way scientists thought about soil historically and society supported the technologies that transformed the soils? Yet surely this nexus must be expanded to include human values that influence choices and the way human values change with changes in science, technology, and nature. How can we think about everything being connected to everything else in a simple way that also allows us to dig in more deeply? *Theory.* One can reduce "everything" to being within one of five systems: value systems, knowledge systems, social organizational systems, tech-

nological systems, and environmental systems. One can "see" these interacting at a point in time, like different species in an ecosystem, yet also see them coevolving, selecting on each other, over time as new traits or invading species of technology, or ways of organizing or of knowing, emerge and prove fit with respect to each other, or not. This systemically connected yet changing system can be illustrated as follows.

The workshop will review the historic lines drawn between society and nature and argue that a coevolutionary synthesis provides an innovative and productive way to understand dynamic relationships. It provides a new way to think about nature and our relationship to nature, even who we are. From a coevolutionary perspective, we can see how for the past two centuries humanity has coevolved around fossil carbon energy rather than natural systems. We can see how the increasing dominance of markets as a form of social organization has favored the use of economic and market metaphors in the sciences. Evolutionary thinking has long been conflated with progress and competition has been given more emphasis than cooperation because of economic thinking. Today we see nature described as natural capital and our dependencies on nature portrayed as ecosystem services because this "fits" with the dominance of market thinking in economics in the knowledge system and the rise and now dominance of markets in the social organizational system. Thus ways of knowing interrelate with nature and society dynamically too.

This workshop will document the role of coevolutionary thinking in biology, how this pattern of thinking about systems and their dynamics has been effectively utilized in the social sciences, and how it might be used within the humanities as well. The workshop format involves a presentation by the instructor and discussion of the assigned readings.

Workshop leader: Christopher Oscarson, Brigham Young University

From Linnaeus to Climate Change: art and science in the anthropocene

Carl Linnaeus facilitated a revolution in scientific understanding that influenced both science and the humanities and continues to sway modern conceptions of the human and his/her place in the world. The epistemology he helped establish, however, has changed through time and evolved into multiple configurations that simultaneously reveal and shape the human relationship to the physical world. Evidence of these diverse means of apprehending the world is evident in the reception of Linnaeus's work in various fields and historical moments. Through a combination of lecture and discussion drawing on illustrative examples from nineteenth-, twentieth-, and twenty-first century art, literature, and film, we will outline the historical reception of Carl Linnaeus and his ideas in order to examine the development and implications of ecological thought down to our contemporary moment in an age of environmental crisis.

Workshop leaders: Libby Robin and Sverker Sörlin, KTH Royal Institute of Technology

Non-fiction and Nature writing: reaching audiences beyond the academy

Writing the environment – it's not always about what you see.

This workshop focuses on writing about true stories about nature and the outdoors. It is designed for people who want their research to reach wider audiences – as performances at writers' festivals, as columns in newspapers and magazines, and on radio or television. We will particularly concentrate on writing sounds, smells and emotional responses, as nature-writing touches on so much more than what we see. Our preliminary reading is of two short essays by American nature writer Annie Dillard. We will discuss these texts briefly and then examine very brief examples of student writing (in English) prepared according to a set of guidelines made available in advance (in the RTC packet).

Workshop leader: Kate Soper, London Metropolitan University

The Humanities and the Environment: contradiction, crisis and the politics of prosperity

This workshop is conceived as a follow-up to my plenary lecture on these themes, and will focus on the contradictions between the aims and values of humanities studies and those dominant in the (so-called) 'real' world of work and the economy. In considering the environmental implications of these contradictions I would hope that our discussions can include both the influence of recent shifts in cultural studies (postmodernism, posthumanism) and the possible role of the humanities in opening up new ways of thinking about the 'good life' and the politics of prosperity.

The format of the workshop will involve a brief introduction by me, to be followed by informal discussion. Please come having given some thought to the role of the humanities in the current environmental context, and prepared to talk about that. Guidelines on suggested readings will be circulated in advance (in the RTC packet).

Workshop leader: Karen V. Lykke Syse, University of Oslo

Approaching Environmental Management and Policy Issues from a Humanistic Perspective

Interdisciplinary research plays a critical role in virtually every field of study in the sciences, arts and humanities. The aim of this workshop is to explore the ways in which humanists can formulate particular research problems within environmental policy and management, and explore what kinds of research tools and methods are applicable to us. The focus in the empirical examples presented will be on interpretation of qualitative data acquired from ethnographic fieldwork, interviews and material culture. In the following discussions we will explore potential problems which might arise when presenting inter-

disciplinary humanistic studies to a hard-science audience. The format of the workshop involves a lecture by me, followed by a short break, and then a brainstorming and discussion session concerning the humanities' role in environmental discourse.

Workshop leader: **Eren Zink**, Uppsala University

Studying Environment as a Social and a Natural Construction

This seminar offers an opportunity for participants to "try out" the concepts of *coproduction* and *actor-networks* in their own research. The first part of the seminar is a discussion of a case study of the making of climate change in Vietnam. By applying these concepts to climate change in Vietnam, we reveal the manner in which the production of knowledge is a result of the conflation of nature, politics, culture and economy. Drawing upon preparatory readings and the case study, in a roundtable format, seminar participants will next introduce their own research and how they might employ coproduction and actor-networks to explain nature and environment in their own work. This will be followed by a general discussion on the potentials and problems of employing actor-network approaches in the humanities and social sciences. Preparation for the seminar includes a moderate amount of reading and a very short written introduction to the participant's research topic and theoretical approach. The latter should be sent to the workshop leader by October 16th (see the RTC packet for further details).



About the Plenary Speakers

Carole L. Crumley is Professor emerita in the Department of Anthropology, University of North Carolina, Chapel Hill. Her research interests include: the epistemology of complex adaptive systems, especially as regards human societies; "Two Cultures" (science/humanities) problems in inter- and transdisciplinary research; integrated global- to local-scale historical ecology; historical climate change; evolution of landscapes; social inequality; social memory; and the applications of geomatics (esp. GIS/remote sensing) to anthropology, ecology, and regional planning. As volume editor and contributor her books include Historical Ecology: Cultural Knowledge and Changing Landscapes (1994) and (co-edited with Alf Hornborg) The World System and The Earth System: Global Socio-Environmental Change and Sustainability Since the Neolithic (2007). Her articles include: "From Garden to Globe: Linking Time and Space with Meaning and Memory" in The Way the Wind Blows: Climate, History, and Human Action (2000); "Remember How to Organize: Heterarchy Across Disciplines" in Nonlinear Models for Archaeology and Anthropology (2005); and "A Conceptual Template for Integrative Human-Environment Research" in Global Environmental Change 15 (2005). Professor Crumley is now a Senior Social Scientist at the Stockholm Resilience Centre, Stockholm University.

Greg Garrard is Senior Lecturer in English at Bath Spa University, where he also directs the Writing and Environment Research Centre. He is the Immediate Past Chair of the Association for the Study of Literature and the Environment (UK and Ireland) and a National Teaching Fellow of the Higher Education Academy. Dr. Garrard is the author of Ecocriticism (Routledge 2011, 2nd ed), managing editor of Green Letters: Studies in Ecocriticism, and editor of Teaching Ecocriticism and Green Cultural Studies (Palgrave 2011) and the forthcoming Oxford Handbook of Ecocriticism (Oxford University Press). A comprehensive collection of his research is available at http://bathspa.academia.edu/GregoryGarrard.

Richard Norgaard is Professor of Energy and Resources at the University of California, Berkeley. He is an eclectic scholar with one solely authored book, four co-authored and co-edited books, four additional multi-authored monographs, and over 200 other publications in environmental and ecological economics, environmental sociology, environmental epistemology, and other fields. He is recognized within the field of economics and the field of ecological economics (Kenneth E. Boulding Award, 2006) for both his critiques of and contributions to economics even while he spends most of his time working across disciplinary ways of understanding. His research emphasizes how the resolution of complex socio-environmental problems challenges modern beliefs about science and policy and explores development as a process of coevolution between social and environmental systems. His writing is informed through work on energy, environment, and development issues around the globe with different periods of his efforts emphasizing Alaska, Brazil, and California. Elected as a Fellow of The American Association for the Advancement of Science in 2007, Professor Norgaard serves on the Intergovernmental Panel on Climate Change and on the International Resource Panel of the United Nations Environment Pro gramme. He has actively been engaged with the Millennium Ecosystem Assessment, and

other assessment efforts including UNEP's The Economics of Ecosystems and Biodiversity and UNEP's Global Environmental Outlook.

David Nye is Professor of American Studies at University of Southern Denmark, Odense. He is author or editor of more than twenty books on the history of technology in the United States, dealing with a range of topics such as electrification, the automobile, the assembly line and technological narratives, with a concern for the complex relations between culture and the natural world. These works include: When the Lights Went Out: A History of American Blackouts (2010); Technology Matters; Questions to Live With (2006); America as Second Creation (2003); Consuming Power (1998); and American Technological Sublime (1994), all from MIT Press. Professor Nye is the recipient of many prizes and awards, including the Leonardo da Vinci Medal for his body of work as a whole. He has taught at Copenhagen and Warwick universities, and been a visiting professor at the universities of Cambridge, Harvard, MIT, Oviedo, the Netherlands Institute for Advanced Study, and Notre Dame. A founding member of NIES and national coordinator of the network in Denmark, Professor Nye is a by-fellow of Churchill College, Cambridge.

Kenneth Olwig specializes in landscape theory in the Department of Landscape Architecture, Planning and Heritage at the Swedish University of Agricultural Sciences (SLU), Alnarp campus, where he holds an appointment as a full professor. He earned a PhD in Geography from the University the University of Minnesota, where he studied with Yi-Fu Tuan. A combination of aesthetic, legal, literary and cultural geographical approaches characterize Professor Olwig's approach to landscape and the relationship between society and nature. His interests range from the effect of cultural perceptions of nature and landscape in regional development, to the role of ideas of law and justice in shaping the political landscape and its physical manifestations. These issues are the topics of two monographs: Nature's Ideological Landscape: A Literary and Geographic Perspective on its Development and Preservation on Denmark's Jutland Heath (1984) and Landscape, Nature and the Body Politic: From Britain's Renaissance to America's New World (2002). From 1993 to 1996 Kenneth Olwig was Senior Research Fellow at the Man and Nature Humanities Research Center, Odense University, where he worked on the E.U. Research Project: "Nature, environment and landscape: European attitudes and discourses in the modern period (1920-1970) with particular attention to water regulation." In 1994 he was a fellow in the residential seminar "Reinventing" Nature at the University of California Humanities Research Institute, Irvine. His contribution to this seminar was published as: "Reinventing Common Nature: Yosemite and Mt. Rushmore--A Meandering Tale of a Double Nature" in Uncommon Ground: Towards Reinventing Nature, (ed.) William Cronon. (1995). Professor Olwig was also a fellow of the residential seminar, Landscape, Law and Justice at The Norwegian Center for Advanced Studies, The Norwegian Academy of Science, Oslo, in 2002-2003. Among the outcomes of this seminar is the 2008 book, edited by Olwig and Don Mitchell, Justice, Power and the Political Landscape (London, Routledge).

Libby Robin is Guest Professor of Environmental History, KTH, Stockholm. She visits from Canberra, Australia, where she is a Senior Research Fellow at the National Museum of Australia's Centre for Historical Research and a Senior Fellow at the Fenner School of

Environment and Society at the Australian National University. A historian of science and environmental ideas, Dr. Robin has published widely in history, Australian studies, museum studies, environmental science and the ecological humanities. Her book *How a Continent Created a Nation* (2007) won the New South Wales Premier's Prize for Australian History in 2007. Her history of ornithology in Australia, *The Flight of the Emu* (2001), won the inaugural Victorian Premier's Literary Prize for Science Writing in 2003. Her volume *Boom and Bust: Bird Stories for a Dry Country* (which she co-edited and contributed to with Robert Heinsohn and Leo Joseph) won the Whitley Medal for a Landmark Zoological Publication in the year of its publication. She is a founding member of the ecological humanities initiative in Australia. The paper she is delivering in Sigtuna is part of the *Expertise for the Future* initiative, an IHOPE case study, Stockholm Resilience Centre.

Paul Sinclair is Professor of African Archaeology, and has been particularly interested in evidence-based spatial analysis of material culture distributions in regional and landscape perspectives. He has worked on socio-environmental interactions in farming-community and urban contexts in the central African and Indian Ocean regions. The complexity of linear and non-linear processes operating in multi-scalar contexts underline the need for joint research teams and therefore he has been engaged in comparative work in Mozambique, Madagascar and Sri Lanka. Prof. Sinclair has also been involved in rethinking the role of Africa in the Indian Ocean trading networks resulting from the recent identification of 1st millennium BC Harappan and early Buddhist ceramics on the coast of East Africa. 400 dated sites from the last 12 000 years are viewed in time series in relation to soils and vegetation covers and provide a basis for comparison with similar data from the Amazon region and from South East Asia. Professor Sinclair was the project leader and chief volume editor of *The Urban Mind: Cultural and Environmental Dynamics* (2010) and has authored numerous studies in the fields of comparative and environmental archaeology. He has just completed an overview of urbanism in Africa for the Oxford Handbook of African Archaeology.

Kate Soper is Emeritus Professor of Philosophy attached to the Institute for the Study of European Transformations at London Metropolitan University, and a Visiting Humanities Professor at Brighton University. She worked as a journalist and translator before becoming a full-time academic. She has published widely on environmental philosophy, aesthetics of nature, theory of needs and consumption, and cultural theory. Her books include What is Nature? Culture, Politics and the Non-Human (1995), (with Martin Ryle) To Relish the Sublime: Culture and Self-Realisation in Postmodern Times (2002); and, as co-editor, Citizenship and Consumption (2007) and The Politics and Pleasures of Consuming Differently (2008). Her study on 'Alternative hedonism and the theory and politics of consumption' was funded in the ESRC/AHRC 'Cultures of Consumption' Programme (www.consume.bbk.ac.uk). She has been a member of the editorial collectives of Radical Philosophy and New Left Review and a regular columnist for the US journal, Capitalism, Nature, Socialism. In recent years she has contributed to catalogues or given talks and lectures in association with a number of art exhibitions, and recently participated in the AHRC funded photography project on utopia and landscape ('Edge of Dream') at Goldsmiths College and Camberwell Art School.

Notes on the Contributors

The following individuals have made meaningful contributions to the Environmental Humanities symposium and researcher training course, either directly as paper authors, respondents, lecturers, panelists and/or session chairs or behind the scenes as support staff. The symposium organizers gratefully acknowledge all of their contributions.

Ingeborg Aarsand is a masters student at the University of Oslo in the field of North American Studies. She is in the process of exploring the field of the environmental humanities from the perspective of American Studies. Her background in the Norwegian environmental movement, combined with extensive cross-cultural exchanges with the Pacific Northwest of North America, sparked her interest in environmental history and ecocriticism.

Jonas Anshelm is a professor at the Department of Thematic Studies – Technology and Social Change at Linköping University. His research mainly concerns the political history of ideas with a special interest in technology, energy and environmental issues. Anshelm has written about the political history of ideas surrounding nuclear energy in Sweden (Mellan frälsning och domedag, 2000), the controversies surrounding the Swedish final storage of radioactive waste (Bergsäkert eller våghalsigt?, 2006) and a number of articles concerning environmental history, in particular on topics such as climate change and the convergence between ENGOs and business (Environmental Values, 2011).

Porvarður Árnason has a PhD in multi-disciplinary environmental studies, focusing mainly on environmental philosophy and politics. His research interests include the aesthetic experience of nature, foundations of nature protection, landscape analysis, and the perception and conceptualization of global warming. Dr. Árnason is the Director of the University of Iceland's Hornafjör ur Regional Research Centre and also a Specialist in environmental studies. During his career he has supervised around 20 graduate students.

Jenny Beckman is Senior Lecturer in History of Science and Ideas at Uppsala University. Her research focuses on the history of biology in a broad sense, from botanical rambles and herbarium management, to the statistical tools and databases of modern systematics and biodiversity informatics. Of particular interest are questions concerning education and science and the public, as these play out in schools, museums, and naturalist organisations. Selected publications include: "Collecting standards: Teaching botanical skills in Sweden, 1850-1950" in Science in Context 24 (2011); "Landskapsfloror: Att inventera över gränser" in Sven Widmalm (ed.), Vetenskapens sociala strukturer (2008); and "Nature's Palace: Constructing the Swedish Museum of Natural History," in History of Science xlii (2004).

Sigurd Bergmann is Professor of Religious Studies at the Department of Archaeology and Religious Studies at the Norwegian University of Science and Technology in Trondheim. His previous studies have investigated the relationship between the image of God and the view of nature in late antiquity, the methodology of contextual theology, visual arts in the





indigenous Arctic and Australia, as well as visual arts, architecture and religion. He chairs the executive committee of the European Forum on the Study of Religion and Environment, of which he was the principal founding member. Selected publications include: Geist, der Natur befreit (1995)/Creation Set Free (2005), God in Context (2003), In the Beginning is the Icon (2009), Raum und Geist (2010), (ed.) The Ethics of Mobilities (Farnham 2008), (ed.) Theology in Built Environments (2009), and (ed.) Religion and Dangerous Environmental Change (2010).

Hannes Bergthaller received his doctorate in American Literature at the University of Bonn. He is an associate professor at the Department of Foreign Languages and Literatures at National Chung-Hsing University in Tai-Chung, Taiwan, and a founding member of the European Association for the Study of Literature, Culture and the Environment (EASLCE), as whose vice-president he currently serves.

Beatrice Björkskog is a student at Mälardalen University and is now working on her masters thesis in literature. She hopes to continue her studies as a graduate student in the field of ecocriticism.

Gunnel Cederlöf is associate professor in the Department of History, Uppsala University. Her publications include Bonds Lost: Subordination, Conflict and Mobilisation in Rural South India c. 1900–1970 (1997), Landscapes and the Law: Environmental Politics, Regional Histories, and Contests over Nature (2008) and, co-edited with K. Sivaramakrishnan, the volume Ecological Nationalisms: Nature, Livelihoods and Identities in South Asia (2005).

Lena Christensen holds a three-year research grant from the Swedish Research Council and is based at Lund University Centre for Sustainability Studies. She received her doctorate in American literature from Lund University in 2005. In her research she is interested in how literary texts represent sustainability challenges of different kinds. One interest is the shaping of subjectivity in the face of deepening environmental crises and another is the representation of climate change in contemporary cultural texts.

Rose Dumas is a student and course coordinator at Cemus at Uppsala University, where she is responsible for the course Critical Perspectives on Sustainable Development in Sweden and Actors and Strategies for Change – Towards Global Sustainabilities.

Jonas Ebbesson is Professor of Environmental Law at Stockholm University. In his research, he essentially focuses on transboundary dimensions of environmental law, in particular with respect to public interests, public participation and access to justice. He also conducts research on the responsibility of transnational corporations for harm to health and the environment, on justice aspects of environmental law, and on law and social-ecological resilience. Jonas Ebbesson chairs the international Compliance Committee of the Aarhus Convention (UNECE).

Eva Friman is an intellectual historian and an ecological economist, with an interest in theories of science, discourses and power, and ecological economic theory development

from the perspective of interdisciplinary sustainability studies. She is currently a researcher within the interdisciplinary project "Global Patterns of Production and Consumption" and the program director of Cemus at Uppsala Centre for Sustainable Development, Uppsala University. Among her publications are: No Limits: The 20th Century Discourse of Economic Growth (2002); (with Flora Hajdu et al.) "'But tractors don't fly...': an interdisciplinary analysis of neoliberal agricultural development interventions in South Africa" (submitted 2011); and (with Gloria Gallardo) "New marine commons along the Chilean coast – The management areas (MAs) of Peñuelas and Chigualoco," in the International Journal of the Commons 5.2 (2011).

Gloria Gallardo is Director of Research Studies for Cemus Research Forum (Cefo) at Uppsala University. She has lectured at all levels in a broad range of subjects such as research methodology, philosophy of science, sociological classics, gender, development studies, political economy, environmental studies, and globalization.

Heather Goodall is Professor of History in the Centre for Cosmopolitan Civil Societies at the University of Technology, Sydney and co-editor of the journal Conservation and Society. Her research is in Australian Aboriginal history, in environmental history, particularly in relation to rivers and water, and in intercolonial studies of the Indian Ocean. Publications include: Invasion to Embassy: land in Aboriginal Politics (1996); the co-authored Rivers and Resilience: Aboriginal People on Sydney's Georges River (2006); and the co-edited Echoes from the Poisoned Well: memories of environmental injustice (2006) and Water, Sovereignty and Borders in Asia and Oceania (2009).

Axel Goodbody is Professor of German Studies and European Culture at the University of Bath, UK. He studied German, French and English at Trinity College Dublin and the University of Kiel. He has published on modern German literature, in particular literary and filmic representations of nature, and ecocritical theory. He was the founding President of the European Association for the Study of Literature, Culture and Environment and is Associate Editor of Ecozon@: European Journal of Literature, Culture and Environment.

Per Gyberg is an associate professor at the Department of Thematic Studies – Technology and Social Change at Linköping University. His profile is within the sociology of knowledge and he has mainly studied different learning practices where subjects such as energy and environment have been dealt with. Gyberg has written about how the area of knowledge of energy is handled in secondary and tertiary schools (*Energi som kunskapsområde*, 2003), as well as articles such as "The Construction of Facts" (*International Journal of Science Education*, 2009) and "Framing Devices in the Creation of Environmental Responsibility" (Sustainability, 2010).

Steven Hartman is a founding member and present chair of the Nordic Network for Interdisciplinary Environmental Studies (NIES), based at the Division of History of Science and Technology, KTH Royal Institute of Technology. He is also research fellow in American Literature at Uppsala University and associate professor of English at Linnaeus University. A PhD from the State University of New York at Albany ("Faces of Thoreau in American Literature," 2003), Hartman has published literary criticism and creative writing widely in journals internationally and was the recipient of the New York State Thayer Fellowship in the Arts for his fiction. His current research examining environmental consciousness in recent American literature is supported by a four-year grant from the Swedish Research Council.

Alf Hornborg is an anthropologist and Professor of Human Ecology at Lund University. His research has dealt with cultural and political aspects of the relations between societies and their natural environments through time, with a particular emphasis on South America. His books include The Power of the Machine (2001), Rethinking Environmental History (2007), The World System and the Earth System (2007), Global Ecology and Unequal Exchange (2011), Ethnicity in Ancient Amazonia (2011) and Ecology and Power (in press).

Martin Hultman is currently a postdoctoral fellow in the Department of Historical, Philosophical and Religious Studies at Umeå University. He holds an interdisciplinary MA in Social and cultural analysis and a PhD in Social and technological change from Linköping University. Hultman's current research critically engages with Environmental Utopias, Ecopreneurship and Expectations on 'green' technologies.

Maunu Häyrynen is professor of Landscape Studies at the University of Turku and adjunct professor (docent) in Art History, University of Helsinki. He leads the School of Cultural Production and Landscape Studies, located at the University Consortium of Pori. He has formerly acted as university teacher and researcher at the Degree Programme of Landscape Architecture, Helsinki University of Technology. His academic background is in art history, his PhD thesis pertaining to the history of Helsinki public parks and park politics (1994). His other research interests entail the construction of nationalistic landscape imagery, transboundary landscapes and landscape conservation. Publications include: Dossier: "The Transboundary Landscape of the Schengen Border" (guest editor), in Journal of Borderlands Studies 24.2 (2009); (together with Olavi Granö & Niina Käyhkö) "Finnish landscape studies - a mixture of traditions and recent trends in the analysis of naturehuman interactions" in BELGEO, Revue belge de géographie 2.3 (2004); "A Kaleidoscopic Nation: The Finnish National Landscape Imagery" in Nordic Landscapes, Region and Belonging on the Northern Edge of Europe, eds. Jones & Olwig (2008); "Assessment" in Landscape Theory, eds. DeLue & Elkins (2008); and "Bildspråket i finländsk landskapsavbildning," in Nationens röst, texter om nationalismens teori och praktik, ed. Sverker Sörlin (2001).

Anna Maria Jönsson is an associate professor in media and communication studies at the Department of Culture and Communication at Södertörn University in Sweden. Her research interests include journalism and the public sphere, science and environmental communication. Examples of recent publications include: "User-generated content and the news: Empowerment of citizens or interactive illusion?" in Journalism Practice 5:2 (2011) and "Framing Environmental Risks in the Baltic Sea: A News Media Analysis," AMBIO 40:2 (2011).

Dolly Jørgensen is a researcher in the Department of Ecology & Environmental Science at Umeå University. She is an environmental historian interested in natural resource management, the

interaction of technology and nature, and the ways in which the "natural" is conceptualized. Her PhD dissertation from the University of Virginia focused on urban environmental problems in late medieval English and Scandinavian cities. She is currently working on a history of Rigs-to-Reefs policy development and researching mammal reintroduction projects.

Finn Arne Jørgensen is associate senior lecturer of history of technology and environment at Umeå University, Sweden. He earned his PhD in Science and Technology Studies from the Norwegian University of Science and Technology in 2007. He published Making A Green Machine: The Infrastructure of Beverage Container Recycling with Rutgers University Press, in 2011 and co-edited Norske hytter i endring – Om bærekraft og behag in 2011. Dr. Jørgensen is a board member of the European Society for Environmental History.

Örjan Kardell is PhD in agrarian history at the Department of Historical, Philosophical and Religious Studies at Umeå University and active in the research program "Future Forests". His publications include: Hägnadernas roll för jordbruket och byalaget 1640–1900 (2004); "Vallning, bete, mjölkning och hägnader kring sekelskiftet 1900" i Svenska landsmål och svenskt folkliv (2006); and "Arkivens bild av skogen som resurs under 1650–1950 – en handledning" in Nycklar till kunskap: Om människans bruk av naturen (2010). At the moment he is writing an article together with Anna Lindkvist about the death of forests.

Amanda Lagerkvist is an associate professor of media and communication studies at Södertörn University. She is currently involved in a research project financed by The Bank of Sweden Tercentenary Foundation ("The Times of Televison"), where she explores mediated trauma and the televisual commemoration of 9/11 in Sweden. She is co-editor of Strange Spaces: Explorations into Mediated Obscurity (2009) and author of Feeling Futures: Media and Memory in New Shanghai (in review).

Thomas Lavelle directs the Center for Modern Languages at the Stockholm School of Economics, where he teaches graduate, undergraduate and faculty-development courses on the application and consequences of English as an international lingua franca in professional and academic contexts. He serves as a regular visiting lecturer on translingual academic writing at Uppsala University's Department of History and Stockholm University's Law School while also guest lecturing on writing, learning and teaching at a number of universities in Sweden and across Europe.

Susanna Lidström is a PhD student at King's College, University of London, where she is writing an ecocritical thesis on the poetry by Ted Hughes and Seamus Heaney. She also works as NIES assistant at KTH Royal Institute of Technology.

Karl-Johan Lindholm is assistant professor at the of Department of Urban and Rural Development, SLU and Senior Lecturer at the Department of Archaeology and Ancient history, Uppsala University. Lindholm's main competencies lie in landscape archaeology, land-use history and Geographical Information Systems (GIS). His present research is based on a long-term analysis of collective forms of natural resource management in northern Sweden.

Lindholm coordinates the research initiative "Rethinking Human Nature," which aims to develop humanistic cross-disciplinary research based on GIS and landscape perspectives.

Anna Lindkvist is PhD in history at the Department of Historical, Philosophical and Religious Studies at Umeå University and is active in the research program "Future Forests." Her publications include: (together with Örjan Kardell and Christer Nordlund) "Intensive Forestry as Progress or Decay?: An Analysis of the Debate about Forest Fertilization in Sweden, 1960–2010," in Forests 2:1 (2011); (together with Camilla Sandström, Karin Öhman and Eva-Maria Nordström) "Governing Competing Demands for Forest Resources in Sweden," in Forests 2:1 (2011); and Jorden åt folket: National föreningen mot emigrationen, 1907–1925 (2007).

Mark Luccarelli is the principal founding member of NIES and national coordinator of the network in Norway. With a PhD in American Studies from the University of Iowa, he has taught at Rutgers University and has been Associate Professor of American Studies at Oslo since 1995. He is the author of Lewis Mumford and the Ecological Region (1995) and coeditor of Green Oslo, forthcoming from Ashgate.

Pamela Marston currently works as a lecturer within the Academy of Education, Economics and Business, University of Gävle, Sweden. She holds an MFA from the University of Virginia, during which time she also worked as a liasion with the DOE/Department of Energy on the Right to Know act, and as a lab assistant in the Department of Neuroscience. In addition to other courses, she teaches a course using EU environmental, social, and biotech policy, and a course on research trends, economics, and politics. She is a member of an ongoing research project on digital literacies.

Peter Mortensen was educated in Denmark and the USA. He is associate professor of English at Aarhus University, Denmark, where he teaches modern British and American literature. He has published a book on Romanticism (Palgrave, 2004) and numerous essays on writers like Knut Hamsun and D.H. Lawrence. Having a strong interest in modern environmental and life reform movements, he is currently working on a study of the twentieth-century back-to-nature novel from agrarianism to cyberpunk.

Erland Mårald is lecturer and docent in history of science and ideas at the Dept. of Historical, Philosophical and Religious Studies at Umeå University and is active in the research program "Future Forests." His publications include (as co-editor together with Christer Nordlund) Kamerajägaren: Stig Wessléns skildringar av naturen och det samiska (2010); Svenska miljöbrott och miljöskandaler 1960–2000 (2007) and Jordens kretslopp: Lantbruket, staden och den kemiska vetenskapen 1840–1910 (2000).

Annika E. Nilsson has a PhD in environmental science and over 20 years of professional experience as a science writer. She currently holds a position as Senior Research Fellow at Stockholm Environment Institute. Her research is about communication at the science-policy interface, and includes studies of social learning in climate and biodiversity policy

development. She also focuses on the Arctic, including studies of the implications of Arctic environmental change for international politics.

Christer Nordlund is Professor at the Department of Historical, Philosophical and Religious Studies at Umeå University and Pro Futura Scientia Fellow at the Swedish Collegium for Advanced Study (SCAS) in Uppsala, and is active in the research program "Future Forests." His publications include Hormones of Life: Endocrinology, the Pharmaceutical Industry, and the Dream of a Remedy for Sterility 1930–1970 (2011); (as co-editor together with Erland Mårald) Kamerajägaren: Stig Wessléns skildringar av naturen och det samiska (2010); and Det upphöjda landet: Vetenskapen, landhöjningsfrågan och kartläggningen av Sveriges förflutna, 1860–1930 (2001).

Henrik Otterberg is an economist at the Chalmers Science Park in Gothenburg, Sweden, and an independent scholar. His Obscurity and Authority in Thoreau's Walden was published in 2005, and Bernströms bestiarium – en djurens nordiska kulturhsitoria (ed.) in 2008. He is currently at work on a collection of essays on literary zoöntology, involving readings of Bram Stoker, Philip K. Dick, Henry David Thoreau and others, and on a Swedish introduction to continental, prehistoric parietal art.

Christopher Oscarson is an associate professor of Interdisciplinary Humanities at Brigham Young University and director of the BYU Scandinavian Studies program. He holds a PhD from University of California, Berkeley in Scandinavian Languages and Literatures, with a designated emphasis in film. His research has focused on the intersection of ecological discourse with Nordic literature and film in the twentieth and twenty-first centuries. He is coediting together with Claire Thomson a collection of ecocritical essays dealing with Scandinavian art, literature, and film entitled Nordic Naturecultures (forthcoming 2012). Publications include: "Toxic Places: Chernobyl and a Sense of Place in Nordic Literature" in A Comparative History of Nordic Literary Cultures, Vol 1 (2011); "Where the Ground Answers the Foot: Kerstin Ekman, Ecology, and the Sense of Place in a Globalized World," in Ecozon@: European Journal of Literature, Culture, and Environment, 1.2 (2010); and "Linnaeus 1907: Oscar Levertin and the Reinvention of Carl Linnaeus as Ecological Subject," in Scandinavian Studies 79.4 (2007).

Andrea Rodriguez Osuna is a student and course coordinator at Cemus at Uppsala University, where she is responsible for the course *The Global Economy – Environment, Development and Globalization*.

Anna Samuelsson, PhD in sociology, is a researcher at the Centre for Gender Research, Uppsala University and guest researcher at Medical Museion, Copenhagen University within the research project Zoo/mbies and Nature Morte: Bodies at Museums 1800-2007. She is the author of I naturens teater. Kultur- och miljösociologiska analyser av naturhistoriska utställ-ningar och filmer (In the Theatre of Nature: Analysis of Natural History Exhibitions and Films from the Perspective of Cultural and Environmental Sociology), Uppsala University (2008).

Per Sandin is Senior Lecturer in Bioethics and Environmental Ethics at the Swedish University for Agricultural Sciences, Uppsala. He received his PhD in philosophy from the

Royal Institute of Technology, Stockholm, in 2005. His research concerns various topics in applied ethics and his publications have appeared in *Environmental Values*, *Ethical Theory and Moral Practice*, and *Environmental Ethics*.

Anna Storm is PhD in history of technology at the Centre for Baltic and East European Studies (CBEES) at Södertörn University. Her doctoral thesis was titled *Hope and Rust:* Reinterpreting the industrial place in the late 20th century (Royal Institute of Technology, 2008). Currently she holds a postdoctoral position funded by the Swedish Research Council tied to the project "Politics of Remembering: contested heritage processes at Ignalina and Barsebäck nuclear power plants".

Karen Lykke Syse is a cultural historian. She is associate professor at the Centre for Development and the Environment (SUM), University of Oslo. Her research interests pivot around environmental history and policy. Her focus is on environmental discourse and practice; agrarian and arboreal landscape studies; social and cultural aspects of hunting and angling, and nature in Early Modern thought. Recent publications include: From land use to landscape: A cultural history of conflict and consensus in Argyll (2009) and "Expert Systems, Local Knowledge and Power in Argyll, Scotland" in Landscape Research 35.4 (2010).

Sverker Sörlin is Professor of Environmental History at the Royal Institute of Technology, Stockholm. He has worked on a range of subjects connecting history, culture, and politics with environment, science, and landscape. In recent years he has worked mostly on the science politics of climate change in the 20th century with a special focus on the Arctic. Recent and forthcoming publications include: "The Contemporaneity of Environmental History: Negotiating Scholarship, Useful History, and the New Human Condition," in the Journal of Contemporary History 46:3 (2011); "The Anxieties of a Science Diplomat: Field Co-production of Climate Knowledge and the Rise and Fall of Hans Ahlmann's 'Polar Warming'," in Osiris 26: Revisiting Klima, eds. Fleming & Jankovich (2011); (with J. von Heland) "Works of Doubt and Leaps of Faith: An Augustinian Challenge to Planetary Boundaries," in the Journal for the Study of Nature, Religion, and Culture (in press); "Northscapes" in History, Technology, and the Making of Northern Environments, eds. Dolly Jørgensen & Sverker Sörlin (University of British Columbia Press, fc); and Polar Extensions: Norden Beyond Borders, ed. S. Sörlin (London: Ashgate, fc).

Anna Tunlid has a Ph.D. in history of science and ideas. She is a senior lecturer at the Research Policy Institute, Lund University. Her research interest is the history of life sciences, with a focus on the interaction between the development of certain research fields – in terms of knowledge production, organization and institutionalization – and changes in science policy. She is currently working on a project on the development of biodiversity in Sweden.

Eren Zink completed a PhD in cultural anthropology at Uppsala University in 2011 with a thesis titled *Flexible Science*: An Anthropology of Scientists, Society and Nature in Vietnam. His interests are science studies, knowledge production, environment and economic anthropology. He also has a Masters degree in anthropology from the University of Cincinnati, USA, and a Bachelors degree in anthropology and environmental studies from Kenyon College, USA.

