FRAMING NATURE

SIGNS STORIES AND ECOLOGIES OF MEANING

ABSTRACTS

The European Association for the Study of Literature, Culture, and the Environment (EASLCE) Biennial Conference
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SIGNS, STORIES, AND ECOLOGIES OF MEANING

ABSTRACTS

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PLENARY LECTURES

THE CARRYING: MATERIAL FRAMES AND IMMATERIAL MEANINGS

WENDY WHEELER
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From an ecological and biosemiotic point of view, the idea of a frame applies both to the framing effects of natural and cultural contexts and also to the frame as formal cause: the mind, skeleton and musculature with which any organism acts back on its environment is, at the same time, and as Gregory Bateson and Jesper Hoffmeyer have both pointed out, an embodied historical story of that mutual poiesis. This is both a material and a semiotic process. In a, by now, rather famous little passage from a 1997 New York Review of Books review essay of Carl Sagan's The Demon-Haunted World: Science as a Candle in the Dark, biologist Richard Lewontin wrote that 'it is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our a priori adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counter-intuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door'. The assumption – a product of the eighteenth and nineteenth centuries, and in fact counter to all our ordinary experience – is that the fact of material causation must exclude non-material causes altogether. But not only do words and symbolic meanings, mere material no-things, have performative power, they can also boost our health and self esteem or break our

hearts. Beyond these well-researched and attested facts, meanings and knowledges grow like organic life does. Our relation to narrative is clothed in this enormous immaterial material power. In this paper I will discuss what I call 'the carrying': the dependence upon material bearers of a non-material causative power some of the most exemplary powers of which are to be found in the work of art.

TIME AND SPACE IN URBAN PLANNING: COMMUNICATIVE INFRASTRUCTURE OF IMPLEMENTING NEW CONCEPTS OF MOBILITY AND ENERGY IN THE CITY

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Sustainable urban planning is understood as a communicative process which reflects the concepts of time and space in the sectors of architecture, technology, and social structure in order to improve mobility systems and energy supply. Therefore, semioticians may contribute to the empirical investigation of discourse processes which brings together citizens, planners, architects, administrators, politicians. The focus on sustainability implies not only considering effectiveness in the dimensions of time and space, but also decisions on the preservation of cultural heritage. The modelling of socio-cultural sign processes involved in this highly specialized and yet transdisciplinary discourse asks for the expertise of semioticians linking the intermediary fields of urban discourse, sociology, and ecology. The paper attempts to illustrate this modelling with an exemplary look at current projects of this kind (Basel, IBA Hamburg and Berlin) in order to better understand which communicative maxims may improve the mediation between diverse interests of the communicators involved in this discourse – for a better living and an effective time management in urban space, including the historical, technical, and sociocultural/inter-cultural implications of its semiosis.

INTEGRATING HUMANITIES SCHOLARSHIP WITHIN THE SCIENCE OF GLOBAL ENVIRONMENTAL CHANGE: THE EXAMPLE OF INSCRIBING ENVIRONMENTAL MEMORY IN THE ICELANDIC SAGAS (IEM), AN IHOPE CASE STUDY

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IEM is a major interdisciplinary research initiative examining environmental memory in the medieval Icelandic sagas. The initiative brings together teams of historians, literary scholars, archaeologists and geographers, as well as specialists in environmental sciences and medieval studies, to investigate long-term human ecodynamics and environmental change from the period of Iceland's settlement in the Viking Age (AD 874-930) through the so-called Saga Age of the early and late medieval periods, and well into the long period of steady cooling in the Northern hemisphere popularly known as the Little Ice Age (AD 1350-1850). In her 1994 volume inaugurating the field of historical ecology Carole Crumley argued in favor of a "longitudinal" approach to the study of longue durée human ecodynamics. This approach takes a region as the focus for study and examines changing human-landscape-climate interactions through time in that particular place. IEM involves multiple frames of inquiry that are distinct yet cross-referential. Environmental change in Iceland during the late Iron Age and medieval period is investigated by physical

environmental sciences. Just how known processes of environmental change and adaptation may have shaped medieval Icelandic sagas and their socio-environmental preoccupations is of great interest, yet just as interesting are other questions concerning how these sagas may in turn have shaped understandings of the past, cultural foundation narratives, environmental lore, local ecological knowledge etc. Enlisting environmental sciences and humanities scholarship in the common aim of framing and thereby better understanding nature, the IEM initiative excludes nothing as "post- interesting" or "pre-interesting." Understanding Viking Age first settlement processes informs understanding of 18th century responses to climate change, and 19th century resource use informs understanding of archaeological patterns visible at first settlement a millennium earlier. There is much to gain from looking at pathways (and their divergences) from both ends, and a long millennial scale perspective is one of the key contributions that the study of past "completed experiments in human ecodynamics" can make to attempts to achieve future sustainability. IEM is a case study of the Integrated History and future of People on Earth initiative (IHOPE) led by the international project AIMES (Analysis, Integration and Modeling of the Earth System), a core project of the International Geosphere-Biosphere Programme; the initiative is co-sponsored by PAGES (Past Global Changes) and IHDP (The International Human Dimensions Programme on Global Environmental Change). This talk brings together two of the main coordinators from IEM's sponsoring organizations, NIES and NABO, to reflect on the particular challenges, innovations and advances anticipated in this unprecedented undertaking of integrated science and scholarship, a new model for the scientific framing of nature.

PRESENTATIONS

TRICKS OF NATURE: MIMICRY AND DISGUISE IN VICTORIAN NATURAL HISTORY WRITING

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Through history, Western science, philosophy and culture have often conceptualized nature as a source of truth. The pastoral mode of storytelling idealized rural environments as morally superior to the artifice and falsity of town. The romantic philosopher Jean-Jacques Rousseau claimed to find his insights 'not in books written by your fellow creatures, who are liars, but in nature, which never lies'. Natural historians frequently presented the organic world as designed by God, charging every part of it with divine wisdom and moral significance. To lie seemed uniquely human, testifying, as Thomas Aquinas had argued, to humans' free will and consciousness. Nature, by contrast, appeared transparently truthful, displayed in the uncontrived growth and instincts of plants and animals.

My paper will explore how such ideas became increasingly problematic through the nineteenth century, as naturalists observed and theorized about mimicry and disguise in the organic world. Naturalist-writers early in the century, such as William Kirby and William Spence, noted the tendency of organisms to deceive each other, by either imitating the appearance of other species, or camouflaging themselves. Their attempts to describe such deception as part of God's universal design raised awkward questions about the supposed moral authority of nature, and the intentions of its creator. As Charles Darwin would later ask, if nature was moral and orderly, then 'why

… has nature condescended to the tricks of the stage?' Further, the capacities of animals and plants to both deceive and be deceived complicated natural theology's view of them as automatons. Instead of acting solely out of innate reflexes and instincts, organisms might be imagined as partial agents, learning from and responding creatively to their environments. Far from being a 'book' of divine meanings, nature seemed more a site of contested meanings and interpretations, mediated through many agents embedded in it. I will analyse the rhetorical strategies which Kirby and Spence used in their immensely popular *Introduction to Entomology* (1815-26) to try to smooth over these problems, presenting natural mimicry and disguise as mechanisms designed by a moral creator.

Further, I will trace how the disturbing implications of organic deception were fully realised in the later writings of Darwin, Henry Walter Bates and Roland Trimen, who reconceptualised it as a function of natural selection. Lying and dissembling were perhaps capacities which did not separate humans from nature but linked them to it. Contrary to the popular claim that natural selection emptied nature of meaning, nature in this light seemed rather to explode with meaning, shattering into an infinite network of floating signifiers and interpretants. However, Darwin and his supporters also encountered problems in expressing these ideas, writing in a language shaped by the assumptions of creationist natural theology. Their efforts to describe nature objectively, as though sketching the blueprint of a machine, clashed with the semiotic dispersal revealed by natural mimicry and disguise. Such phenomena could only be understood by viewing nature through the eyes of each organism that interpreted them.

FRAMING NONHUMAN AGENCY IN CONSOLE GAMES

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As digital environments reinvent material and discursive practices, a study on video games might as well reconfigure ecocriticism. Bringing the human and the nonhuman as well as the technological together, video games create posthuman environments by further blurring the boundaries between nature and culture. Katherine Hayles, one of the major contributors of critical posthumanism, has noted that "now, as in the past, the human, the animal, and the technological are joined in shifting configurations of value", referring to the paradigm shift in cultural studies. Considering Hayles's commentary, it is inevitable to see that video games provide a flexibility as such, in which the material and the discursive function together, because as a common characteristic of the genre, value systems undergo a change, where the human as the key figure of Western thought no longer holds a central position. Instead, in this genre, value, existence and knowledge are distributed more evenly among the human, the animal, and the technological. Video games function effectively to help envisage nonhuman agency, as they allow a less rigid perspective in framing nature than other conventional narrative types. Being actively involved in the creation of reality on the virtual level, players undergo the double impact of a posthuman experience, totally eroding the already broken boundaries between the real and the unreal, nature and culture, and the human and the nonhuman. This essay concentrates on how the old generation console games such as *Alex Kidd in Miracle World*, *Son-*

ic the Hedgehog, and *The Castle of Illusion starring Mickey Mouse* had already caused the emergence of naturecultures in digital environments in the late 1980s and the early 1990s. The key point to be examined is how nonhuman agency is portrayed in each of these games and how video games contribute to the framing of nature in the virtual environments.

THE IMAGE OF NATURE IN POSTWAR JAPANESE HISTORICAL AND CULTURAL FRAMEWORK: FICTIONAL EMBODIMENTS AND REPRESENTATIONS OF NATURE IN HAYAO MIYAZAKI'S ANIME

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Starting as a local product and dramatically gaining a global acceptance and interest, Japanese animated fiction can be seen as a popular ground in which contemporary issues are represented. On the local level, each narrative in anime highlights some of the most contemporary issues of Japanese identity and reflects Japanese history in the near past.

Japanese animators began to create their own work earlier, yet, animation as a commercial art form really got started in the postwar period following World War II. According to Susan J. Napier, with its rapid shifts of narrative pace and its constantly transforming imagery, the animated medium is perfect for illustrating the atmosphere of change being observed not only in Japanese society but also in all industrialized or industrializing modern societies of the world. The abovementioned postwar atmosphere – the atomic bomb and its horrific after-effects, rapid industrialisation for compensating the destructions of the war, etc. – gave way to the production of apocalyptic anime scenarios, underlining the extending distance between man and nature. In this respect, anime may be seen as a dark mirror reflecting the local history of postwar Japan.

Contrary to most anime produced in the late twentieth century, which portray a dark apocalyptic vision centring on the destruction of society and even the planet, the famous Japanese anime artist, di-

rector and screenplay writer Hayao Miyazaki's anime presents hope for a brighter future and the possibility of bridging the highly industrialised humanity who is distanced from nature, and the tainted, damaged nature, as well as restoring the long-lost balance between man and his natural environment in the postwar period. In other words, Miyazaki's scenarios present a combination of dark, apocalyptic and bright, hopeful, even Edenic representations of the natural environment. In this respect, each Miyazaki anime includes a character (or characters) carrying a piece of nature literally in themselves. They can be labelled as hybrid characters transgressing the boundaries between nature and culture, human and non-human, the civilised and the uncivilized, urban and rural. By creating such anime characters, Miyazaki tries to erase the distinctive line between creatures of nature and creatures of the civilized human world. Shapeshifting protagonists, such as Haku in *Spirited Away*, who has both a human and a dragon body, Howl in *Howl's Moving Castle*, who occasionally turns into a strange creature of nature and has a body which is a combination of various animals, the wolf-princess in *Princess Mononoke* raised by wolves, the river gods and spirits of nature walking around in human forms, and many others equipped with various anthropomorphic qualities, in a way, were presented by Miyazaki as a remedy to the distance between human and nature in postwar Japan. In this respect, to underline their companionship, in most of Miyazaki's anime not only is nature personified and fit into human embodiments, but also human beings are given natural frames and embodiments.

In a nutshell, Miyazaki's anime deal with a Japan that existed before the industrial, capitalist era, a Japan in which nature, rather than humans, ruled. Through anime, he offers a possibility of cultural recovery and restoration of the lost balance between human and nature to a humanity trapped in contemporary wastelands.

THE COMPOST OF GREEN LIVING: OLSON AND SNYDER'S PROPRIOCEPTIVE POETICS AS ANTIDOTE TO THE RHETORIC OF ECOLOGICAL HARMONY

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The rhetoric of green living, as conveyed by North American political, corporate, and popular interests, has in the last decade weeded its way into mainstream culture by employing metaphors that frame ecological crisis as an issue that can be resolved at the level of personal action. Whether it be buying the vehicle with "eco boost," voting for the greenest platform, or wearing fashions made from the most natural materials, the proliferation of ecological metaphors in popular discourse has helped position eco-conscious behavior as a fundamental component of civic responsibility. Paradoxically, this public deployment of metaphor, by semiotically constructing ecological identity rather than fostering a more engaged environmental ethos, has furthered the divide between the human and the ecosphere. The topoi of ecological metaphors have aggressively fabricated an eco-conscious ideology that promotes a logic of fetishistic disavowal, one that conveniently ignores harsh truths in favour of an environmental ideology that interpellates green subjects in an effort to reify neoliberal political and economic interests.

This paper will argue that displacing the ideological frame that facilitates this logic of fetishistic disavowal demands embracing a compost aesthetic in relation to the ecological. In particular, it will look at the "projective verse" of American poets Charles Olson and Gary

Snyder as examples of a compost aesthetic that deconstructs utopian metaphors of ecological harmony and replaces them with a poetic "ecological survival technique" (Snyder, *Earth House Hold*, 117) that embraces language as a system that "does not impose order on a chaotic universe, but reflects its own wildness back" (Snyder, *Place in Space*, 174). By adopting a proprioceptive, rather than perceptive, stance towards the natural world, the works of Olson and Snyder construct their own poetic ecosystems that sit in precarious balance with the world around them; as such, their work is a form of exploration; its attempts to position the self in Nature are as ephemeral, slippery, and paradoxical as the language that gives the poem its own life. By foregrounding the writing process as a form of composting their work demands attention to the quotidian realities suppressed by the logic of fetishistic disavowal. As such, it positions the tension between self, the chaos of the Natural world, and the imaginative desire to give order to these events as a form of recycling that reactivates the tradition of wilderness writing, both in its tropic and formal organization, and in its kinetic attentiveness to the chaos, disruption, and regeneration of hostile ecologies. Olson and Snyder's proprioceptive compost poetics thus work to define Nature as a volatile space, one of decay and renewal that demands recognition that being at home in the world requires a paradoxical and violent denaturalization of the self's cohesive space within Nature. Read against the contemporary logic of fetishistic disavowal, their works provide a blueprint for destabilizing the semiotic construction of utopian green living.

MEANING AND MATTERING: FRAMING THE ECOLOGY OF VALUE IN THE NATURAL WORLD

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Discussions of value in the natural environment have, in the 20th and 21st centuries, been constrained by a scientistic focus on subjective anthropocentric valuation. Of course historical lessons related to abuses of human beings and nonhuman animals have continually demonstrated that merely anthropocentric subjective valuation leaves open space for practices that are ethically unsettling. A central goal of the ongoing project of environmental ethics is to offer, in a compelling and coherent fashion, a descriptive framing of objective value in the nonhuman natural world. The proposal I advance is to utilize a biosemiotic account of meaning-making, or semiosis, to push down objective value to the boundaries of life as a means of responding to this need within environmental ethics. Several scholars, including most biosemioticians, would agree that meaning-making is a necessary condition of life – that is, every living thing makes meaning, or is semiosic. I propose that we can draw the further conclusion that every living thing is morally considerable. The additional premise required to reach this further conclusion is that every account of meaning is necessarily an account of *mattering*, a normatively-bound interpretation that, when recognized, compels our moral consideration. Mattering reflects a preference for or against a particular state. On the account of objective value I advance, preferences ground objective value.

What, then, is the relationship of meaning to mattering? At first glance, we might think that meaning is a necessary but not sufficient condition for mattering. That is, an object can mean something to me without it mattering to me; but nothing can matter to me without meaning something. But, I think, this is a restricted view of the meaning/mattering relationship. Rather, I think that meaning is both necessary and sufficient for mattering. Furthermore we can draw out a hierarchy of the meaning/mattering relationship: the degree of mattering that drives action is a kind of emergent property of the semiotic complexity of meaning. Indeed the claim that for every instance of meaning you have an instance of mattering is a strong one. However, I do not think it an unreasonable claim. While mattering is always tied to meaning, it is distinguishable from meaning – for the agent or the researcher – only when it drives the semiotic agent to act.

The goal of the science of biosemiotics is to offer compelling and predictive descriptions of meaning in the full range of living systems. What sets trees apart from thermostats – and all life apart from all artifice – is this potential for semiosic meaning-making, on which moral consideration of their objective value stands. Non-living things have merely subjective value based on the extent and depth to which they are signified by semiosic agents.

During the course of my presentation, I will respond to charges of equivocation and insufficient evidence that stand in the way of this understanding of the ecology of meaning and of value in the natural world.

FRAMING THE RIVER OF WORDS AND HISTORY: THE THAMES AS ECOPOETIC SHAPER OF LONDON NARRATIVES

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As a reminder of the often porous and fluctuating boundaries between natural and cultural/urban ecologies, there is the tightly intertwined history of London and that of the river Thames which gave the city birth. Be they prominently foregrounded or more diffusely backgrounded, the river's presence and the ecopoetics of water inspired by it feature, unsurprisingly, in many of the literary or visual arts evocations of London life.

Moreover, both in its more pastoral and Gothic aspects, the Thames has coursed through a variety of "psychogeographies", i.e. subjective recyclings of history and topography that propose alternative explorations and understandings of this urban space called "London." An early psychogeographical rendition of it was developed in the socially-engaged, millennial poetry of William Blake. In his wake, contemporary novelists and local historians like Iain Sinclair and Peter Ackroyd have produced their own Thames-inspired psychogeographies, which revel as "a form of poetic field-walking […] in which the traces of the past are there for those who have eyes to see it" (Ackroyd, *Thames Sacred River*, 2005, p. 15).

Yet, despite their – at first glance heavily anthropocentric – recyclings of London's history, fragmented postmodern fictions like Ackroyd's *Hawksmoor* (1985) and Sinclair's *Downriver* (1991) also invite us to probe into the related questions of "Who/what frames

what?", "Who/what reflects what?", and "What is the exact nature of the framed/reflected?"

Indeed, Ackroyd's and Sinclair's urban spaces in part derive their Gothic sublimity from the uncertain boundaries between the framing and the framed: is it human agency and the productions of culture that delineate and contain a merely passive mirroring surface called "Thames"? Or is it not rather the river as agency – with its own particular time, geology, wave-like processes, and patterns of serpentine meanderings and mirroring distortions – that sustains the overall architecture of London's human, urban spaces and of the novels that, as cultural artefacts, explore them?

As such, works like Sinclair's *Downriver* or Ackroyd's *Hawksmoor* remind us of the dangers of confusing environmental literature with mimesis and ecopoetics with naturalism. In both these psychogeographies, the literal glimpses of the Thames may be only intermittent; yet the river as *agency* – not only in an aesthetic/ecocompositional sense, but also sometimes in a more functionalist, evolutionary/biocultural one – heavily informs Sinclair's and Ackroyd's London narratives and reconstructions of its history.

To my knowledge, no ecocritical reading of Sinclair's and Ackroyd's Thames-inspired psychogeographies of London has yet been attempted. This is precisely what my presentation would like to do, partly bringing into the discussion the insights of ecocompositional scholars like Sidney Dobrin or biocultural theorists like Nancy Easterlin.

SEMIOTICS FOR THE PROBLEM OF CONCEPTS IN FRAMING NATURE

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"No meaning without a frame". For structural analysis the first implication of framing is the demarcation of the research object from its surroundings. Then the object can be divided into units which be compared internally. Only after that can the object be compared with related external objects within a field. It is then that can "meaning" rightly be applied to it, in its internal composition and as distinct from others. It seems to follow that framing implies conceptualization, that the object in question can only have meaning if it is analyzed according to a generalized system. This poses a difficult methodological problem when the object in question is "nature" because at least for philosophy it is difficult to find a definition for nature other than 'that which is not reason' or 'that which is inexpressible in conceptual terms'. The framing process seems to take away from the object that which is integral to its nature. This is not a new problem, but Charles Peirce's sign theory provides some tools for thinking around the paradox.

In Peirce perception of nature does imply framing, but framing does not imply conceptualization. Objects can be demarcated by indices independent of generalization. Comparisons go on between objects by means of icons and new, unexpected meanings arise abductively, and all these terms refer to pre-symbolic signs. One way of putting this is that pre-linguistic 'metaphors' organize the space of perception before concepts enter into play. Another way of putting

this is that new meanings always germinate aesthetically. This semiotic aesthetics harmonizes with some contemporary aesthetic theories regarding a necessary creativity in the expression of nature as well as an unavoidable conflict with (lost) nature in art.

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FROM ENVIRONMENTAL JUSTICE TO PLANETARY IMMUNITY: ELYSIUM AS A BIOPOLITICAL FABLE

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Neill Blomkamp's *Elysium* (2013) has been both praised for the boldness with which it raises questions of environmental justice, and panned for the compromises it makes as it shoehorns its answers into the generic form of a blockbuster action movie. In this paper, I want to argue that the film should be seen as an exceptionally lucid exposition of the biopolitical stakes in an age of global eco-logical emergency. Its relevant short-comings have to do not so much with its allegiance to particular cinematic conventions, but with its conception of environmental justice. On the one hand, the film re-hearses a fairly traditional critique of capitalist exploitation; on the other hand, and more interestingly, it presents the mechanisms of exclusion that undergird the ecosocial order in terms that are better understood within the conceptual framework of Roberto Esposito's theory of social immunization.

According to Esposito, the logic of immunization, whereby life protects itself by incorporating that which threatens it, is at the center of modern biopolitics. The risk it entails is that of an auto-immune disorder, when the mechanisms of defense turn against the body they are meant to protect. This is precisely what happens in *Elysium*, where the security apparatus ends up turning against the state – and it is, again, a loosening of its boundaries that allows the body politic to survive. The ambiguities that re-

main at the film's end as to how immunity might be instituted on a planetary scale are, from this perspective, not necessarily a weakness; rather, they reflect that this problem cannot be resolved in a principled or conclusive fashion.

LANDSCAPE AS A MASTER FRAME

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Landscape is a complex term; Kenneth Olwig speaks of its spatial and platial dimensions, it combines aesthetic and scientific aspects, and it is a representation of culture as well as its material base. In contrast to nature and environment, landscape has a territorial limitation, turning it into a master frame for studying systemic cultural/ecological interaction in the territory of a specific community. This master frame has the potential to combine subordinate frames such as aesthetics, politics, geology, ecology, and history. The ecomuseologist Peter Davis calls such a community-oriented concept of landscape "lifescape." Landscape is not only created by human intervention and projection, it also provides a material frame for culture, thus being a factor creating that culture. This reciprocity has been regarded as deterministic by the dominant constructivist paradigm but is being revived in the environmental humanities. It is helpful to look at earlier approaches to the question of how landscape influences culture, for example Friedrich Ratzel, who founded the field of anthropo-geography at the end of the 19th century to overcome then commonsensical environmental determinisms. The article will exemplify the application of different frames in a landscape master frame, the focus on community that a platial understanding of landscape rovides, as well as the mutual influence of environmental and cultural aspects in a systemic understanding of landscape with two cases, the Udora region in the Komi Republic in northwestern Russia and the Inpang Community Network in northeastern Thailand.

In Udora the collapse of the Soviet Union meant the end to agriculture, leaving behind fallow fields slowly reverting to taiga, villages strewn with remnants of industrial agriculture, and a shrinking population reverting to hunting and gathering. There is a mismatch between local interest and a centralist state that sees landscape as a resource for minerals and wood. The remoteness and reversal to an ancient lifestyle also has the potential to revive the community, as there are now local initiatives attempting to bring tourists who experience the beauty of the "endless green sea of the forest" and traditional hunting. The NGO Silver Taiga works on a compromise between logging and preservation interests.

Inpang Community Network is an organization of farmers who rejected monoculture and the dependency on agribusiness and revived a traditional landscape on their farms, which they call "edible forest," marked by ecological diversity and a spirit of experimentation and learning from each other. The farmers' sense of beauty reflects both ecological diversity and the community spirit. The landscape created by the network has to be seen with the historical frame of armed resistance in the region, their ethnic background and traditional forest lifestyle, and the application of Buddhist principles with regard to landscape.

Whereas the case of Udora shows how a community reacts to massive landscape changes outside their control and attempts to recreate a platial sense of landscape, the community of Inpang actively reshapes landscape. Both can be analyzed applying a combination of frames.

'OUR DIFFICULT / CHTHONIC ANCHORAGE': KATHLEEN JAMIE, ALICE OSWALD AND THE PROBLEM OF BIOREGIONAL ROOTEDNESS IN UK ECOPOETRY

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One of the defining paradigms of early Ecocriticism was its lococentricity, which conservatively privileged community and continuity as preconditions for a renewed commitment to the environment. Indeed, the Heideggerian concept of 'dwelling' remains a frequent critical reference, with many writers insistent about the need to re-evaluate relationships at the level of the dirt and bones of territory. For many ecocritics, then, the means of framing nature is with reference to historical interchanges between the human and nonhuman world in a particular location. There is an assumption that a renewed sense of 'nativity' might be salvaged from a supposed contemporary 'disconnection' from the past, and so with a more 'authentic' relationship to the environment.

Second-wave ecocriticism, however, departed from this stance, with critics such as Ursula Heise and Timothy Morton advocating a global perspective. Heise argues that 'in a context of rapidly increasing connections around the globe, what is crucial for ecological awareness and environmental ethics is… not so much a sense of place as a sense of planet.' (Heise 2008: 55). The limited prospect of the local, Heise argues, is not a useful frame in dealing with global environmental crisis. Morton conceives of world ecology as a 'mesh' of interanimating connections. In an inversion to enframing particular places, or regions, as the locus for environmental meaning, Morton's mesh proposes a decentred position

in which it is impossible to locate oneself in this way: 'since everything is interconnected, there is no definite background and therefore no definite foreground' (Morton 2010: 28). The corollary of this thinking, however, is that it becomes less possible to enframe specifically, and so to conceive intelligibly, one's immediate environment: 'in a situation where everything is potentially significant, we're lost.' (ibid. 30). Morton's de-framing mesh is a challenge to self, community, and nation. The subject is, I would argue, potentially disempowered as a result.

In this paper I will consider the work of British ecopoets, including Alice Oswald and Kathleen Jamie, whose recent output has relied upon specific attention to local place, and folklore, with Oswald's *Dart* (2002) described as a 'bioregional biography' (Bristow 2006: 183). These poets would appear to embody the impulse towards lococentricity, yet I would argue instead that they promote bioregional concerns in a way that privileges a cosmopolitan bioregionalism (Mitchell Thomashow) that is inclusive, sensitive to minority identities, and engaged with modes of modern scientific thinking that go far beyond traditional mimesis of a local culture and landscape. Moreover, I will discuss these poets' enframings of local spheres as a defence of the significance of bioregional identity, and a means of positively enframing place: as a point of departure, as a standpoint from which to conceive of global concerns: a necessary rootedness that does not preclude wider environmental engagement.

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NATURE FRAMING ITSELF IN WALLACE STEVENS'S POETRY

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Even though Wallace Stevens has long been considered an idealist, there has been a radical reevaluation of his works, with ecocritics, among others, asserting that Stevens engages with the resistant, material world. In this salutary endeavour to establish the pregnant role of nature "out there" in Stevens's poetry, the body and its perception (in the phenomenological meaning of the term) become the mediators between mind and the natural world ("our sense" making the "Bouquet of Roses in Sunlight" (*Collected Poems* 430) real, for example). Stevens's nature is then seen by ecocritics such as Gyorgyi Voros in *Notations of the Wild* as obeying three main metaphors: nature as house, nature as body, and nature as self – as if in Stevens's poetry, the frame setting the human apart from nature had been extended to include nature, so that there existed absolute continuity between non-human "thereness" and the life of the mind. What this study would like to argue is that even though nature "out there", and its mediation through the body, play a dominant role in Stevens's poetry, the frame impeding perfect continuity throughout the entire human and non-human world has not been extended to the point of holding a continuous universe in itself. It is still there, often excluding humans from the perception of (and identification with) nature as a whole. This frame, apparently imposed by nature itself, determines what humans / readers have access to. The world in its continuity is often described against one punctual element of nature, portioned out from

the whole, and whose role in turn is to portion out other elements of nature in the poem. Not only do the firecats in "Earthy anecdote" (*CP* 3) circumscribe the world of the poem, trapping the bucks inside it; they also end the poem by closing their eyes, as if whatever they perceived was all that could be said. Similarly, in "A Rabbit as King of the Ghosts" (*CP* 209), the nocturnal scene is perceived in the light of the rabbits' presence and appears as a self-contained world, yet we know from the outset that there is an outside, a world according to the cat, which will not be described to us. This sharp delineation of portions out of wholes within nature might be due to Stevens's conflicting attachment to wholeness on the one hand and particulars such as contingent places on the other ("life is an affair of people not of places. But for me life is an affair of places and that is the trouble" (*Collected Poetry and Prose* 901)). Thus, for example, the essence of his "Indian River" (*CP* 112) is equated with a "jingle" that is to be found all along its shores, yet this completeness is broken by the absence of spring in the surroundings, as "there is no spring in Florida". If nature in Stevens is a house, then, it is a constraining one, and the unity implied by the metaphors of nature as body or nature as self is actually competing with another metaphor pervading Stevens's poetry: nature as the instance framing the poem.

VOICING THE SILENT PLANET: ALEJANDRO AMENÁBAR'S RECOVERY OF EARTH'S NARRATIVE IN AGORA

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In the first installment of C.S. Lewis's *Cosmic Trilogy*, the Earth's *nomen à clef*, Thulcandra, is explained to mean "the silent planet". In the conversation he holds with the Malacandran Oyarsa, space traveller Dr. Elwin Ransom learns that the reasons for that silence are found in the planet's being cut out from the rest of the solar system after its own Oyarsa's fell into evil, thus identifying this "bent" angelic being with the Satan of the Judeo-Christian tradition. Even if the reasons for that silence are not held to be the same as in Lewis's narrative, ecofeminists have also focused on the way our planet has been rendered somewhat mute by NASA's ubiquitous image of the whole earth suspended in space, an image which Spanish director Alejandro Amenábar chose to open and end his most recent film, *Agora* (2009), a narrative of the convulsive times in 4th-century Alexandria revolving around the figure of Hypatia.

In this paper, I will be looking at how Amenábar's choice of shots of the Earth from space at key moments in his narrative contribute to making the audience aware of the unfolding of history in that apparently silent planet. By zooming in and out on one spot in the globe, the camera alternatively engages the viewer with and distances her from the particular event narrated, yet makes complete disconnection impossible by contradicting the film *Alien*'s iconic tagline: even if this extraterrestrial point of view prevents us from making out the

details of whatever horrors are going on "down there" until the camera chooses to zoom in, Amenábar decides that in space screams *can* be heard; indeed, they often provide the soundtrack to the history of a planet which is, therefore, far from being silent.

Agora succeeds in presenting a crude portrayal of the devastating effects of fundamentalisms of any sort, but Amenábar's strategic use of the whole earth image in the course of the film allows us to ask further questions about our relationship with the planet we are living in at the same time as we watch it on screen. Can the Earth's narrative in *Agora* be read as an invitation for viewers to sympathise with the ongoing, circular suffering of its inhabitants and somehow mend their ways to break the circle? Or does it elicit a more misanthropic response and we end up quoting prefect Orestes's "How naive of me to think we'd finally changed?" If that is so, what, then, should be our next move?

TIME TRAVEL AND ROBOT ZOMBIE SPACE WHALE: MANUFACTURED UNCERTAINTY IN STAR TREK IV: THE VOYAGE HOME

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The gaining currency of *Anthropocene* as a critical concept in the humanities and a term in public discourse indicates that the status of human beings as a geological force that impacts the planet as a whole has arrived in the consciousness of academics and the general public alike (Chakrabarty 2009: 206). *Homo sapiens* is implicated in a temporal dimension that far exceeds the life spans of individuals at the same time that it exceeds that of cultures, species, and ecosystems. The narrative offers the possibility of constructing temporal scales that are able to address planetary risk and imagine the impact of unintended consequences beyond individual lifetimes through devices like time travel.

The threat of species extinction has become a common trope in narratives of ecological risk and is frequently employed as a narrative device that illustrates the destructive potential of exploitative human-animal relationships. Framed as a discourse of conservation, the Western anti-whaling discourse largely relies on representing whales as metonyms of nature and whaling as a metaphor for human treatment of nature. *Star Trek IV: The Voyage Home* imagines the impact of whaling in a dimension beyond the temporal or spatial limits experienced by its audience and takes the significance of species extinction to another level.

Approaching this filmic text in the context of Ulrich Beck's *World Risk Society* paradigm, I argue that both the plot device of time travel

and the figure of the alien probe are narrative strategies that make human-made risk visible as such (Beck 2009a: 45). The probe, which I read as a robotic zombie of an extinct species, functions as an embodiment of existential threat originating from what Beck (Beck 2009b: 293) and Giddens (1994: 4) call manufactured uncertainty. In the tension between a local problem, a global catastrophe, and planetary obliteration, the film in this manner imagines the ultimate unknowability of continually replicating manufactured uncertainties, but connects them strongly to shortsighted exploitative human practices and points out the limitedness of the anthropocentric viewpoint.

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MILLIONS OF TREES AND MULTIPLICITIES OF MEANING: ON THE FRAMING OF 'FORESTS' IN INTERNATIONAL POLICY DISCOURSE(S)

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International forest policy is exceedingly complex. In terms of the natural sciences, forests are described as "Complex Adaptive Systems": a conceptual framework which "recognises the complexity of systems (ecological, economic, and social), their hierarchical structures, the interactions and energy flows between these hierarchies, and their capacity for self-organisation and adaptations" (Messier et al., 2011). In social scientific literature, complexity also looms large: for example, it has been noted that "fragmentation" (institutional, discursive and otherwise) is "the core analytic feature of the International Forest Regime Complex" (IFRC) (Giessen, 2013). This 'discursive fragmentation' is perhaps not difficult to explain when considering that, at a national level, 63 *legal definitions* of the word 'tree' have been counted. This semantic complexity increases exponentially when one considers the possible definitions of a 'forest' and of managerial paradigms such as 'sustainable forest management'.

Despite certain degree of consensus with regards to the problem definition (including, for example, deforestation, loss of biodiversity, loss of livelihoods and climate change), international policymakers are able to find little common ground in terms of how to concretely address these problems *in an integrated manner*. In an effort to reduce the complexity inherent to forest policy processes, we aim to develop an under-

standing of 'discursive fragmentation' in the international forest policy sector and theorize its possible implications for future policy processes.

In order to operationalize this research, we perform a comparative analysis of global forest policy discourses and their interrelations at the intertextual, intersubjective and interdiscursive levels. This analysis is operationalized by, first, identifying five primary discourses operating in the IFRC (Civic Environmentalism, Ecological Modernization, Sustainable Development, Industrialism, and 'Limits to Growth').

Using this typology, the 'framing of forests' as an issue area is critically examined under each of the 5 discourses identified. The primary analysis will be performed using Foucault's 'archaeological method' and will be buffered by empirical insights drawn from (at least) 10 interviews with international forest policy experts. Drawing principally from Discourse Theory as understood by Michel Foucault and augmenting this analysis with insights from Semiotic Ecology (Kalevi Kull), this paper will examine how different discourses "problematize" the forest and determine the proposed governance "apparatus/dispositif" meant to address these problematizations (cf. Foucault). In a final step, we will offer conclusions concerning conflicting discursive constructions and identify specific semantic incongruities between the discourses. In the end, we hope to clarify the 'crises of meaning' which prevent substantive action from being taken on this issue area at the international level.

A TRANSCORPOREAL READING OF TOXIC ENVIRONMENTS IN HAYAO MIYAZAKI'S *NAUSICAÄ OF THE VALLEY OF THE WIND*

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Each text is set within a context and so do the species need their own *Umwelt*. This holds true not only for human cultures but also for natural environments. Jakob von Uexküll's theory of *Umwelt* will be discussed in this paper with Lawrence Buell's "toxic discourse" and Stacey Alaimo's "transcorporeality" theory in order to define the "ecologies of meaning" one sees in toxic environments, or "mythography of betrayed Eden" (Lawrence Buell), or "negative images of utopia" (Urich Beck).

The animation *Nausicaä of the Valley of the Wind* (Japanese: 風の谷のナウシカ, Hepburn: Kaze no Tani no Naushika), directed and produced by Hayao Miyazaki and Studio Ghibli in 1984, presents a post-apocalyptic landscape and a toxic environment, where the protagonist Nausicaä and her people reside nearby. The uncanny and creepy jungle in which many virulent and giant insects, worms, fungus and plants thrive is the top goal for Tolmekia, another kingdom, to destroy and eradicate comprehensively. The post-apocalyptic scene seems not so hard to imagine for people in the 21st century when one witnesses Japan's Fukushima Nuclear Disaster, for example.

This paper intends to approach the animation through the lens of material ecocriticism to see how themes such as toxicity, disease, agency, and the environment shape attitudes toward life. Material ecocriticism is mainly about the human body and the way it exists in relation to a larger body of the planet which contains us, which is part of us,

and we are part of it (Harold Fromm, Nancy Tuana, Stacey Alaimo). In brief, the paper will deal with how toxic environments in *Nausicaä of the Valley of the Wind* are represented (dark ecology), how toxic bodies interact with visible/invisible elements and how this communication is becoming a new way out for both human and non-human beings.

VON UEXKÜLL'S CIRCLE AND PEIRCE'S MAZE: TWO IMAGES OF ECOSEMIOTICS

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Critically juxtaposing the work of two of the forefathers of biosemiotics, I propose to present two divergent descriptions of how nature may be framed as an environment, an environment which in turn frames both the bodies and minds of living individuals. Key to each of these two foundational accounts of ecosemiotic framing is the principle that a context does not simply surround the situated individual, but in its differentiation constitutively inscribes an environment with meaning. To lend focus to this juxtaposition of ideas, in each case I will refer to a simple image: a diagram devised by Jakob von Uexküll on the one hand, and a sketch by Charles Peirce on the other.

Uexküll's conceptualisation of the *Umwelt* placed living organisms at the subjective centre of an autonomously encapsulated world, a world structured by the physiology of the creature it served to captivate. This perspective demonstrated that the world of even the most primitive creature was charged with significance, and thus irreducible to an indifferent exchange of matter and energy. Yet, despite ascribing the conditions of experience to the biological makeup of a species, Uexküll presupposed more than one exception to this rule. Firstly, the faculty of language enabled human beings to self-consciously transcend immersion within a particular environment, conceptually mapping their situation, and communicating its structure symbolically. Secondly, unwilling to concede that life evolved through a stochas-

tic process of natural selection, Uexküll insisted that a preordained harmony governed relationships between organisms, and identified the subjective agency of individuals with the quasi-vitalist concept of a Lebensfaktor.

Via his semeiotic logic Peirce envisaged a universe permeated by swarms of signs. Although human beings may again be granted specialised access to these markers of meaning, more than once Peirce intimated that human activity was not alone in being orientated by signs. Peirce's conception of the evolution of both life and the cosmos points to an interpretation of his philosophy opposed to anthropocentrism. For Peirce, signs not only passively rendered the world legible on behalf of an observer, through the complex patterns informing their growth they actively participated in the generation of a world recursively articulating and deciphering its own significance. Anticipating those theories of information, systems, and complexity which helped to advance ecological thinking in the twentieth century, Peirce's semiotics and synechism emphasised the abductive play of relationality and context in the logic directing natural processes.

On the one hand the precarious position of the individual isolated within a beguiling sphere of sense, on the other a glimpse of that labyrinthine network of signs in which our communal existence is entangled: each of these interventions within ecological thinking evokes an aesthetic remainder which cannot easily be settled within traditional notions of inhabitation. In placing them side by side my aim will not be to defend an exhaustive account of the work of either Uexküll or Peirce. Instead, my intention is to salvage a limited sense of what is at stake within past perceptions of our ecologically situated existence, as well as those we have begun to come to terms with in the present.

TRANSLATING ICE: THE GLOSSARIES OF ICE AND SNOW

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This paper will examine the construction of global vocabularies of cold from the mid twentieth century onwards, beginning with the *Illustrated Glossary of Snow and Ice* (Scott Polar Research Institute Special Publication) assembled by Charles Swithinbank and other professional Arctic explorers, and the material stories which relate to the recording and dissemination of these standard terminologies for ice and snow. This includes the international coding of messages due to the shared governance of the Arctic and the facsimile radio transmission of weatherfaxes and ice charts, but also traditions of bibliographic illustration for the identification of dynamic features in the subzero landscape (such as E. A. Wilson's analytical sketches). This paper will map the changing technologies for reporting these regional phenomena of the cold, following this through into modern online databases such as the navy's *Arctic Forecaster's Handbook* and the National Snow and Ice Data Center's *Sea Ice Glossary*.

Drawing from emerging studies in 'eco-translatology', as well as my own previous work on forestry dictionaries ('The logos industry: globalizing the language of the forest'), this paper will address the language system which seeks to create noun categories for dynamic processes - ice that is moving; glaciers that are making certain kinds of noises. The provenance of these cold vocabularies will be set within wider research on the cultural and literary lexicon of snow and ice, including the reception of the "Eskimo Vocabulary Hoax" in linguistics

and literature. Igor Krupnik's recent work on Inuit sea ice terminologies and Julie Kruikshank's indigenous oral histories of glaciers will be balanced against the literary contexts depicted by Spufford (*I May be Some Time: Ice and the English Imagination*) and Wilson (*The Spiritual History of Ice: Romanticism, Science, and the Imagination*). These will be used to explore the famed trope of the semantic slipperiness of ice and snow. The vocabulary histories presented above and the idea of a globally useful and meaningful language will thereby be measured against the cultural histories which continue to imagine poetic self-reflective language as wrought from the cold.

NORDIC FAIRY TALES AND THEIR ILLUSTRATIONS IN RESPECT OF HOW HUMANS FRAME NATURE THROUGH VISUAL ARTS AND STORIES

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This paper discusses John Bauer's artworks, the Swedish fairy tales he illustrated and Tove Jansson's Moomin stories, which are relevant within the context of the conference "Framing Nature: Signs, Stories, and Ecologies of Meaning" since they illustrate through text and image the complex ways in which humans – artists in this case – frame northern nature and are in turn framed by it.

Drawing on Helen Argenius' essay "The artist John Bauer and his world", which appeared in 1996, the presentation considers how Bauer framed the Swedish forest through his work. I aim to discuss John Bauer's long excursions on foot, alone, through the deep forests that line Lake Vättern, in regard to their importance for developing his unique idea of the forest, which he inhabited with "his" fairy-tale figures, the symbols of innate forces of nature. Due to the rich material of his sketches and drawings, the process of "framing nature" through visual arts will be reconstructed for some of his illustrations.

The second part of the presentation will consider how northern nature is framed through the Swedish fairy tales illustrated by Bauer and Tove Jansson's Moomin stories. Furthermore, it is outlined and discussed to which degree the stories illustrate how northern nature frames the life of its inhabitants. The presentation seeks to identify parallels in regard to the relationship between nature and men living

in "the north" and the relationship between nature and little characters of Tove Jansson's stories. Jansson's Moomintrolls, for instance, hibernate, while other characters migrate. Her stories are northern in their intense awareness of seasons and their passing, as Peter Davidson states in his book "The idea of north", which appeared in 2005. Especially "Moominland Midwinter", published in 1957, and "Moominvalley in November", the first version of which appeared in 1971, are fascinatingly realistic about the threatening and sad aspects of northern nature in the context of stories for children.

Taking account of Peter Davidson's book "The idea of north" the final part of the investigation will seek to identify the "idea of northern nature" which is displayed in John Bauer's Illustrations and in Tove Jansson's Moomin stories.

The analysis is centered on Art History and Literature, but will also take into account insights from Philosophy and History.

CHEMICAL UNKNOWNS: PRELIMINARY OUTLINE FOR AN ENVIRONMENTAL HISTORY OF FEAR

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We live in a toxic century. While we cannot see it, each of us is a walking, breathing artifact of humanity's toxic trespasses into nature. Sociological findings suggest that persistent organic pollutants scare human beings in new and special ways. This has more to do with what we do not know about their danger than what we do know, and those unknowns strike at the epicentre of how fear is individually and culturally manifested. The method through which persistent organic pollutants assault human and environmental health, the manner in which they proliferated after World War II, and the unanticipated consequences of their spread are key characteristics of this new landscape of fear. Persistent organic pollutants contaminate rather than merely damage; their pollution penetrates human tissue indirectly rather than attacking the surface in a more straightforward manner; and the threat from exposure is not acute, but rather slow, chronic, and enduring. That we lack a full understanding of the hazards they pose and have little control over environmental mobility distinguishes chemical toxins in the litany of environmental hazards. As a result, a rising culture of fear associated with new toxins is an explicit and unmistakable feature of the post-World War II world.

I mean to investigate fear's environmental narrative and how it has unfolded during the toxic century. A growing fear of chemicals over the past seventy years is a distinct cultural phenomenon, and it

warrants some careful historical analysis. My paper proposes to develop an environmental history of fear, using the global proliferation of persistent organic pollutants as its vehicle. I am especially interested in charting change and continuity in chemical fear as an abstract notion – over time and across geographic space – drawing on cultural responses to chemical threats in Canada, Japan, Sweden, and the United States. I argue that chemical hazards combine with scientific uncertainty, industrial obfuscation, regulatory inaction, and ineffective public communication to formulate an algorithm for social malaise centred on environmental fear.

TIME-LAPSE ECOMEDIA AND BAYOU COLLAPSE

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New media help us understand how and why the Louisiana coast is collapsing into the Gulf, barrier island by subsiding coastline, and industrial canal by brackish bayou, due to a complex pattern of political and economic causes. Time-lapse digital visualizations of land loss in coastal Louisiana, for instance, illustrate how the idea of a stable culture is largely an everyday fiction when it rests on dynamic social-ecological bases. Time-lapse techniques figure also in traditional media depictions of the bayou. The temporality of bayou cultural/natural collapse has been described by Louisiana poet Martha Serpas as "Ordinary Time," in her poem by the same name. This "ordinary time" in turn refers to the layers of culture in Louisiana, in particular the use of a counterpoint of sacred and ordinary time in the ecclesiastical calendars of Louisiana's historically Roman Catholic parishes. Yet the eruption of collapse in the everyday, ordinary time of bayou life calls for Serpas' poetics of accretion and suspension as "Now the sea is under the house / across roads, covering marsh" (31).

This paper identifies and evaluates two categories of time-lapse technique – accelerated remote sampling and a literary counterpoint of accretion/suspension of image and metaphor – across both new and traditional ecomedia, including GIS data assembled into maps by activists on Google Earth, government (NOAA/USGS) environmental visualizations in support of federal restoration policies, pastoral and polemical journalism, Serpas' poetry, and finally a film

elegy *Veins in the Gulf*. These ecomedia reveal oil spills, groundwater salinization, and coastline erosion as foreseeable products, not mere byproducts, of industrialization. Scientific and aesthetic techniques of time-lapse render spectacular the "normal accident" of systematic development of petroleum extraction, refining, and land-loss. These ecomedia also refine prevailing narratives about the Louisiana bayou: that it is intractably poor; that it is inherently fragile; that it therefore can or even ought to be treated in federal policy as a national sacrifice zone, sacrificed to a fiction of durable economic security.

Reading such multiple modes of ecomedia on bayou loss also demands greater precision for how scholars in environmental studies (prompted by environmental justice activists) use geological and cultural concepts of time and scale. In light of the collision of coastal wetlands ecology and the regional politics of industrial re-development in Louisiana, the resulting bayou land loss stands out not only as inherently cultural erosion that abbreviates geological time, but also as a parable of inter-generational environmental injustice.

FRAMES OF VIOLENCE AND TRAGEDY AND THE CHALLENGES FOR ECOCRITICISM

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Increasingly, humanity imagines itself under siege and vulnerable. Perhaps it is a sign of our maturity as a species that we see and try to understand the threats to our survival: colony collapse disorder; new and devastating diseases; global warming; 9/11 and terrorism; increasing food, water, and resource shortages; and so on. Perhaps it is a sign of our intelligence and wisdom that we narrativize our visions of apocalypse and that we entertain ourselves with stories of our own vulnerability before forces which we perceive as profoundly – indeed, lethally – violent toward our very existence. Perhaps our perceptions and almost fetishistic representations of ourselves as being under siege signal changes in our ethics toward other people and toward the natural environment. Yet, to borrow the words of political theorist Jane Bennett, "we continue to produce and consume in the same violently reckless ways" as if we *don't* take our own violence (or the violent reactions to it) at all seriously (*Vibrant Matter* 113) – at least not on a level that would cause us to change our behaviors.

On a pre-dawn run one morning before heading to my university, I saw a man cutting down Acacia trees along the stream beside my residence in Seoul. It seemed an act of profound, premeditated, unjustifiable violence. He explained to me that Acacia, an invasive species, now dominates many mountains in Korea and had been planted by hostile colonial occupiers in the early twentieth century. I stood

dumb and remembered Barack Obama's comment during his Nobel Prize acceptance speech: "A non-violent movement could not have halted Hitler's armies." I ran on, doubting that anyone would have seen the man with the saw as wrong or in any sense violent. Indeed, clutched by a spasm of double-think, I doubted that it *was* wrong or violent, doubted the very notions of right and wrong, violent and peaceful.

It is time to question what exactly we mean by the term "violence." It seems a mistake to accept those statistics "that show violence has been decreasing globally" (CFP for a recent MLA Special Session), since we know that violence toward animals is increasing exponentially as our population increases; that violence toward the natural environment increases with the proliferation of cars, planes, people, and so on; and that things are getting worse.

My talk will analyze the numbing effect of apocalyptic narratives and films with which we increasingly entertain ourselves, and I will suggest that one of the reasons terror has such purchase in the twenty-first century is that it remains one of the few things that still evokes our sense of tragedy and that can still stimulate us into action. Tragic narratives, meanwhile, have extended their rather narrow focus from the fall of individuals to the fall of our entire species, and the creeping fear, as Lear worries, is that "man's life is cheap as beast's." My paper will argue, largely from an ecocritical perspective, the need for a substantial re-evaluation of the terms "violence" and "tragedy" toward definitions that can co-evolve with the world.

JAPANESE AND CANADIAN INFLUENCES ON HIROMI GOTO'S ECOLOGY

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Winner of the Commonwealth Writers' Prize for Best First Book for *Chorus of Mushrooms* (1994, now in its third reprint), and co-winner of the Canada-Japan Book Award for *The Kappa's Child* (2001), Hiromi Goto is an important Japanese and Canadian author who writes across a number of literary genres. To date, most critics have explored her fiction through Western theoretical frames, frames she invokes in her addresses to academic audiences as "interest in aspects of feminist theory or postcolonial theory, or queer theory" (May 2013). An abundance of scholarly work places Goto's fiction as belonging to the gothic tradition or as postcolonial fiction. However, Goto draws attention to these Western labels as secondary to her mandate to write about "non-Eurocentric subjectivity" (Sept 2012).

In a departure from such critical discussions of genre, this paper will argue that while Goto emphasizes the Western intellectual and cultural contexts of her fiction, her works are in fact framed by Japanese ways of reading and writing the natural world and humans' precarious relationship in nature. In *Chorus of Mushrooms* Goto claims to have found inspiration in folk legends of Japan, Japanese Mythology, and in Seidensticker's translations of Murasaki's *The Tale of Genji*. Her later *The Kappa's Child* is similarly interested in writing Japanese folklore and mythology into the Canadian context via people of Japanese heritage and sensibility. Both works are set on isolated farms in

western Canada – one a Japanese mushroom farm and one a Japanese rice farm on the prairies – and both frame and engage with the natural world through folk tales, mythology, and particularly *The Tale of Genji*.

The Tale of Genji is said to have the centrality in Japanese culture that the Bible has in Western society. Thus what Haruo Shirane describes as the "culture of the four seasons" (*Japan and the Culture of the Four Seasons*) and the expression of Japanese Buddhist, Shinto, and Confucian beliefs about nature find much of their source imagery and language in *The Tale of Genji*. I will argue that a Japanese understanding of nature – informed in part by and with a system of allusions drawn from *The Tale of Genji* – frames both *Chorus of Mushrooms* and *The Kappa's Child*. The Japanese understanding of human connection and interaction with nature – very different from the Western belief in Biblical dominion, conquering and hierarchical mastery of the natural world – allow for mythically embodied manifestations of the alterity of the natural world, de-personified and powerful in its own being and agency. Further, I will show how Goto uses these stories and her non-fictional environmental writing to critique both the Western model of community and the Western approaches to environmentalism. In her work, Canada's declarations of 'multiculturalism' and the environmental movement's claims to fundamental scientific and objective 'truth' and 'protection' are shown to be situated in Western narratives of dominion instead of respecting nature's unlimited autonomy and alterity outside of the human language and naming. I will argue this in part through exploring Goto's elusive and interlaced stories in *Chorus of Mushrooms* and *The Kappa's Child* of alien abduction of aliens, interactions with cucumbers, unconception through dancing with mythical water creatures, and the untranslated Japanese dialogue and intuitive communication across species and generations.

BASS ROCK: A FLY-BY

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The Firth of Forth Islands lie strung out along the coast near Edinburgh, Scotland. Their patchwork histories incorporate Benedictine monasteries (Isle of May), dumping grounds for syphilitics and plague-carriers (Inchkeith), lighthouses to domesticate the choppy waters (Fidra), offices for engineers (Inchgarvie), gun emplacements (Inchcolm). They are places of murder and imprisonment, refuge and retreat for heretics, hermits and birds. Recounting an encounter with the inhabitants of Bass Rock, one of the Firth of Forth islands, this paper argues for a cautious rehabilitation of the 'wild'. In so doing I draw on recent thinking about alterity and relation in the environmental humanities and biophilosophy (Smith 2011; Morton 2010; Braidotti 2013). The gannet, a bird adapted for a spent life diving into the sea after fish, is named after Bass Rock, a barely-habitable lump of basalt: the gannet's Latin name is *Morus bassanus*. Every year one of the largest colonies of gannets in the world (150,000 birds) makes its seasonal home on this rock to raise their young. The dark rock is turned white by feathers and shit. Every year 280,000 human tourists sail out and around the island, each entering for a short time a world thick with caw-cawing gannets, their smell, and their aerial energies. On such a trip, when the boat approaches the Bass Rock the anticipatory tourist babble ebbs away, the commentary becomes more reverential: a sense of *something different* creeps over the boat. Reaching the Bass Rock we enter another world, becoming – perhaps – differently

human: sharing some part of another creature's *Umwelt* (life-world) by enhancing the powers one has, or getting new capabilities, if only for a time. The visitor enters a zone of proximity where species meet. In the gannet we glimpse a way of being that while radically different, involves sharing territory: sharing the earth. Yet, at the same time we feel our distance and the impossibility of ever meeting in the same world, even as our different worlds come together, briefly, boating round the Bass Rock. Moreover, this meeting is tainted by a hideous juxtaposition: the skies immediate and full of birds, against knowledge of the fragility of abundance and the possibility of extinction. This paper ends, then, with a careful rehabilitation of the wild: the wild not as that which exceeds us or cradles us in its sublime otherness, but rather the wild as the strangeness that strikes when we recognize shared-but-different ways of being earthly.

STORIES OF CHANGE: FRAMING IN LITERARY NARRATIVES OF ENERGY USE

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The conference in Tartu gives me the opportunity to present and receive critical feedback on the theoretical-methodological framework of a project which is currently under consideration for funding by the UK Arts & Humanities Research Council. 'Stories of Change: Exploring energy and community in the past, present and future' is designed as a large, multidisciplinary project, collecting and curating oral narratives about communities and their use of energy, juxtaposing them with historical and literary narratives, and subjecting all three forms of narrative to a common frame analysis. Apart from developing the methodology of the project, which will adapt that of Gamson and Modigliani's study of attitudes towards nuclear energy (1989), my paper will attempt an initial exploration of representations of energy production, distribution and consumption in English novels concerned with energy system shifts. The aim is to set contemporary literary depictions and imaginations of decarbonising the economy (e.g. Ian McEwan's *Solar*) in the context of earlier accounts of socio-technological transitions. Works discussed may include Charles Dickens's *Hard Times* (1854, depicting a Northern industrial coketown), Jim Crace's historical novel *Harvest* (2013, on conflicts in the proto-industrial, organic economy), and possibly also examples of English life writing, travel writing or nature writing.

NEGOTIATING NATURES, IDENTITIES AND KNOWLEDGES IN COLLABORATIVE CONSERVATION - FOCUS ON MACASSAR DUNES HERITAGE WEEK, CAPE TOWN

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In confronting and overcoming the divisions and injustices of brutal and divisive colonial and apartheid histories, notions of race, ethnicity and identity play a contentious role in contemporary South Africa. A focus on the ways that South Africans self-identity with and through *places* is proving an important component in considerations of transformations in post-apartheid identities (Dixon and Durrheim, 1994, 2004). A focus on the links between places and identities is fundamental given spatial access was profoundly ordered and controlled by colonial and apartheid processes. Further, in Cape Town today, the city remains largely spatially ordered along the lines of apartheid spatial planning (Seekings, 2010). A result is persistently racialised communities that remain suspicious of each other, and through whom political divides are still largely focused on race (Bickford-Smith, 2009).

Drawing on the extensive works of Dixon and Durrheim, I examine a small urban nature reserve in Cape Town to consider how post-apartheid identities are being articulated and re-worked through the lens of urban nature conservation. The Cape Flats are the geographically peripheral spaces of Cape Town city, containing large apartheid-era townships and informal settlements that house the majority of Cape Town's non-white and largely poor population. The

Cape Flats were systematically neglected during apartheid, and the arena of nature conservation is no exception (Layne, 2013; George, 2005). Macassar Dunes Conservation Area is a small nature reserve bordering the coastal townships of Macassar, Khayalitsha and Mitchell's Plain, and the informal settlement of eNkanini.

The reserve is now recognised as highly biodiverse, and is a core conservation site for the municipal nature conservation authority. Conservation authorities and advocates understand Cape Flats communities do not value the remnant spaces of nature on the Cape Flats for biodiversity values, and instead perceive nature and conservation at best as 'irrelevant' (Katschner, 2005; see also Rebelo et al., 2011). Engaging members of the local township communities in collaborative conservation activities is a strategy embraced by the conservation authority to change local communities' perceptions of nature, the reserve and conservation.

Based on participant observation and formal interviews, this study focuses specifically on the annual collaborative conservation activity of Macassar Dunes Heritage Week. Heritage Week involves participants sharing with each other their diverse understandings and relationships to nature. Heritage Week is both deeply symbolic and deeply political in post-apartheid South Africa since it involves racially-divided participants actively sharing, learning, and trying to understand more about each other, and about each other's histories, cultures, identities and places. I analyse how the interactions at Heritage Week are resulting in some re-framings and re-negotiations of what nature is, where nature exists, and what kinds of knowledges about nature are legitimate in conservation practice and collaboration.

THE AGENCY OF MATTER IN RICHARD POWERS' *GAIN*

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In recent ecocritical discourse, matter has begun to matter again, not as prior to language or as an essentialist category separated from mind, but as intricately intertwined with culture, discourse, and power. The project of the material turn is to radically rethink the materiality of nature as well as human and nonhuman bodies which are no longer understood as passive objects, but as vibrant, vital, or performative agencies. As active entities, they interconnect with (active) matter as well as with culture. Or, as Stacy Alaimo has claimed, materiality must be perceived "as co-constituted by various forms of power and knowledge, some of these being more or less 'cultural,' and some more or less 'natural.'" The separation of nature and culture, always challenged by ecocritics, is once again identified as untenable. In my paper I want to pursue the question how non-subjects can act. How can nature and bodies exert power, affect culture, and produce effects? How do we have to redefine the human if we understand that we are constituted of a vital materiality that is, according to Jane Bennett, lively and self-organizing? That we do not live, again Bennett, *on* the earth, but *as* earth? One way of exploring the new concept of materiality is to look at toxic bodies as they demonstrate quite aptly the mobility of toxic elements across bodies and their interrelations with other material substances. At the same time, they are closely linked to issues of politics, history, and science, etc. Using basic insights of material turn scholars such as Stacy Alaimo, Karen Barad, Jane Bennett und

Donna Haraway, I take Richard Powers' novel *Gain* as a representative example of a reconceptualization of matter as agentic. Powers juxtaposes the dying body of Laura Bodey (she has ovarian cancer) with the rise of a large multinational corporation whose agricultural division is seated in her Midwestern hometown. Are the products of Clare International responsible for her cancer? How is matter (cells, genes, pharmaceuticals, chemicals, the dirt in Laura's garden) linked to issues of power, knowledge, politics and the economy in this novel? By trying to answer these questions it becomes clear how a new materialism leads to ethical questions concerning the status and responsibility of humans in the environment.

INFLUENCES OF ENVIRONMENTAL PHILOSOPHY ON ECOLOGICAL RESTORATION PRACTICES IN BRAZIL

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This presentation discusses how the intellectual roots of nascent environmental philosophy in Latin America have implicitly, and increasingly explicitly, affected disturbed land recuperation in Brazil. It asks if something is missing in reclamation programs as currently practiced at Brazilian mines. The execution seems to be technologically competent. However, the landscapes they are creating, especially mine-closure projects, seem devoid of meaning or values. It is suggested that historical intellectual attitudes and paradigms about humans and nature, common to Latin America and especially to Brazil, may have impacted recuperation projects. National traditions of positivism and extreme representationalism are suggested as intellectual culprits. However, it is possible that these may be deflected by new philosophic thinking linked to ethnocultural pluralism. The presentation first describes the relatively recent, but impressive history of disturbed-land reclamation in this continent-size country. One indication of this progress is that approximately 150 Brazilians participated in the fourth World Conference held by the Society for Ecological Restoration in Mérida Mexico in August 2011, and the conference proceedings contain 109 Brazilian presentations. Yet much remains much to be done. The second part of the paper discusses a sensation of "out of place" disquietude that one gets when observing modern-day reclamation projects, despite all the technical advances. There seems to be something missing, especially

in the visual experience. Despite the intensive revegetation and topographic reconstruction, the overall experience conveys messages such as these: *clean geometric shapes of modern machinery*; *controlled industrial landscape devoid of meaning or values*; *mechanical ingredients*; *mechanistic utopia*; *nihilistic*; *non-human scale*; *solitary*; *starkly expressive*. In the third section of the paper, it is suggested that ecological restoration everywhere, not just in Brazil, could benefit from adhering to yet another important Latin American intellectual root: the maintenance of clear and logical epistemological accounting as recommended by the Chilean biologists, Humberto Maturana and Francisco Varela. If applied to the ever-growing restoration knowledge base, such accounting would beneficially lead ecological restoration down a path that considers its activities to be equally artwork and not just scientific practice. Specifically, in the fourth part, I will suggest that what is missing in the logical accounting of today's restoration practices is narrative. The overall problem seems to be the lack of maintaining a clear logical accounting of the knowledge base applied to environmental recuperation projects. One way to correct that problem would be to incorporate visual narrative techniques in recuperation project design. Applying narrative in ecological restoration is not an original suggestion, but I hope to cast it as a more overarching epistemological principle than previously suggested. A narrative approach to restoration especially promises to be fruitful when considering the ethnocultural richness of Brazil. The paper concludes by briefly describing appropriate narrative landscape practices, including *naming*, *sequencing*, *revealing*, *concealing*, *gathering*, and *opening*.

FRAMING BY UNVEILING: APOCALYPTIC EXTRAPOLATION AND HYBRIDITY IN MARGARET ATWOOD'S *MADDADDAM* TRILOGY

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As we face the prospect of imminent ecological disaster, the apocalyptic mode appears to be one of the dominant ways of framing nature and ecological discourse. Lawrence Buell famously called apocalypse in *From Apocalypse to Way of Life* "the single most powerful master metaphor that the contemporary environmental imagination has at its disposal" (287). Due to the grand scale often employed in apocalyptic narrative, Ursula K. Heise describes it in *Sense of Place and Sense of Planet* as "a particular form of imagining the global" (141). Additionally, in *Why We Disagree about Climate Change* Mike Hulme identifies "presaging apocalypse" as one of the four predominant narrative modes employed to frame climate change. In this paper I do not just use apocalypse in its modern sense as a synonym for *catastrophe*, but also return to the original meaning of the word to discuss the manner in which *unveiling* works as a framing device in Margaret Atwood's *MaddAddam* trilogy. Further, I argue that Atwood's apocalyptic imagination is informed by the idea that meaning is created through hybridity and that her apocalyptic extrapolation provides an alternative, albeit ambiguous, to the nostalgia often associated with an environmental impetus.

Atwood's speculative trilogy – *Oryx and Crake* (2003), *The Year of the Flood* (2009) and *MaddAddam* (2013) – has a post-apocalyptic setting, but also includes frequent flashbacks to a pre-apocalyptic

world that is recognisably an extrapolated version of our own. In this near-future world current technologies as well as environmental concerns have had time to develop to their full dystopian (and utopian) potential. A speculative text is always to some extent at least doubly framed, since the intratextual world is by and large shown to be other by means of comparison to the historical situation at the text's conception. Within an outer frame of comparison created through apocalyptic extrapolation, Atwood reveals a possible future principally based on the prevailing apocalyptic framing of nature. In the *MaddAddam* trilogy our contemporary fear of the hybrid is also exploited: by framing nature as hybrid (variable, changeable, dynamic) the boundaries between human–nonhuman and natural–artificial become blurred. In the trilogy hybridity and apocalypticism are intimately connected, and post-apocalyptic survival depends to a large degree on the acceptance of a hybrid framing of human and nonhuman nature.

TRANSFORMING SACRED NATURAL SITES INTO NATIONAL MONUMENTS IN ESTONIA

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Sacred natural sites usually form a part of the traditional patterns of land use among indigenous peoples, reflecting the vernacular understanding of nature and the supernatural forces at work therein. These sites often form a part of a system of sustainable resource management in the community, regulated with a patchwork of specific prohibitions and customs.

On the other hand, the way national natural monuments are defined are more akin to the tradition of royal or aristocratic prerogatives on exercising some rights like hunting for certain species that are in turn barred from the rest of the population (cf. Schama 1995). The choice of areas so delineated and their protection regimes may be derived from such general conditions such as the habitat of a single valuable species or a larger area designated on a map as having special significance. In this way, national monuments may be at odds with vernacular land use.

The paper will discuss the fate of a group of sacred sites in Estonia and offers an interesting example of the interplay between oral traditions related to sacred landscapes and attempts by national elites and institutions to shape, accommodate or create landscape traditions to consolidate national identity. Since the foundation of Estonia as a sovereign state in 1918, some sites have been transformed into national monuments. Whether this has helped or hindered their sustenance and vernacular traditions around them remains ambiguous, while a dynamic dialogue between traditions has appeared.

Estonian sacred natural sites have functioned as such in a traditional culture with no written tradition in a mostly agrarian setting. The customs maintaining the sacredness of such sites emphasize local social cohesion and the relations of the human community with non-human supernatural beings and forces (see Valk 2007). Modern Estonian national identity was founded on myths created within a Romantic literary culture in the 19th century and is based on the "imagined community" of the nation (cf. Anderson 2006). The landscape signs of this identity differ from those of small rural communities.

Since the inception of Estonian national identity, land use and settlement patterns have dramatically changed in property reforms in the 19th and 20th centuries, bringing about upheavals unmatched with anything in the preceding centuries (see Palang et al. 2004). This has led to the physical destruction of numerous sacred natural sites.

Some of the agrarian-era traditions around sacred natural sites remain alive or have been revived in Estonia, including offerings to the sites. Even if the rituals are not observed, the sites – in principle or in particular – are often considered important. But traditional sacred sites are today often also linked to the newer invented traditions surrounding Estonian national identity, taking on patriotic elements. These may originate from Romantic motifs or from the patriotic rituals of the 1930s in Estonia.

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MULTIPLICITY AND *WELT*

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Apropros frames, the advent of semiotic systems from Saussure and Pierce through the linguistic turn which in philosophy crystallized with Rorty and Davidson, has proven to systematically reduce the multiplicity of semiotic nuance and variety to present an almost anthropological reification of specialized specific (sub)cultural discourses. The effect, as Derrida for example points out regarding his cat, is that we incorrectly refer to animals (and other groupings) qua species or members of a category, rather than addressing the referent in its irreducible particularity and context. The task of biosemiotics requires first a reworking of semiotics itself. This paper interprets Jacob von Uexküll's understanding of different beings' *Innenwelt, Gegenwelt*, and *Umwelt* through Deleuzian insights of multiplicity, context, and particularity.

The result is twofold. First, such an analysis recasts biosemiotics not as a unitary discipline consisting of "the human" view of nature, but rather acknowledging the plural viewpoints of cultures and indeed subgroups and individuals within those disparate cultures understanding of natural signs. Here, Heinrich, Heine, and Norenzayan's "The weirdest people in the world?" (*Behavioral and Brain Sciences*, 2010: 33, 61-135) as well as Markus and Kitayama's "Culture and the Self: Implications for Cognition, Emotion, and Motivation" (*Psychological Review*, 1993: 98(2), 224-253) represent formative research on the false universals often assumed by anthropological claims of cross-cultural semiotic similarity. Realizing that our perspectives are

multiple, and that the world shows up differently in our reading of it into our own (particular) signs and symbology, not only requires further work in deciphering what referents mean to particular peoples (with productive comparative research sensitive to differences), but it also permits us to loosen our grip on assigning temporally and cross-culturally fixed notions of meaning, permitting micro-histories and regionality to play a crucial role in biosemiotic analysis.

The second result stemming from this Deleuzian interpolation into Uexküll's insights is that in interpreting biosemiotics intended to apprehend the *Innenwelt* of the radically different (species) other, that such semiotic understandings (for example, the human attempt to decipher what a cat makes semiotically of the referent "being left at home for an extended period of time") also themselves are not generalizable (necessarily) between different members of the same species in a group, same-species groups in different naturalcultural contexts, or even (as with humans) the same animal at different points of time (based on new understandings, patterns, or events of meaning that alter the interpretation of world events).

Brought together, a Deleuzian Uexküll bears insight into the complexity of biosemiotic systems, for humans and nonhumans alike. Confrontation with the sheer plurality of perspective, where an object has different meanings not only for different species, but also for different members of a species, is daunting. But failure to acknowledge such particularity perpetrates potential injustice where consultation of others – or a pragmatic, scientifically-informed act of imagination could produce more understanding – possibly offers a more symbiotic and coherent process of knowledge generation as well as a more humble and deferential environmental politics. Demoting the totalizing nature of language permits the language of nature a more total form.

DEEP-FROZEN HOPE IN THE ARCTIC: THE SVALBARD GLOBAL SEED VAULT

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The Arctic seems to be a hopeless case. Chemical and radioactive pollution, rapid climate change, increasing international competition and resource extraction, threatened indigenous communities and collapsing ecosystems are elements of contemporary dystopian narratives connected with this region.

The story of the Svalbard Global Seed Vault is therefore all the more surprising. In 2008, the Norwegian government opened a seedbank on the island of Spitzbergen in the Arctic Svalbard archipelago. Located inside a mountain and with a stable temperature of -18°C, it stores duplicates of crop seeds from collections around the globe. The vault makes it possible to restore plant species which out of whatever reasons are lost at their places of origin, and thus provides a safety net against the loss of food crops' genetic diversity. By now, more than 770,000 different seed samples are deposited in this Arctic backup.

Beyond fulfilling this material function, the vault has evolved into a unique cultural phenomenon that not yet has been studied from an environmental humanities perspective. In the media, in fictional literature and in film, the seedbank is framed as a quasi-utopian accomplishment. It is depicted both as a prime example of well-working international cooperation and as a specifically national, i.e. Norwegian act of philanthropic and environmental heroism. The vault is framed as the practical application of an anthropocentric environmental eth-

ics and at the same time as a precursor for the practical implementation of ecocentric visions. It is on one hand part of an optimistic environmental narrative that the Norwegian eco-philosopher Arne Næss has called "ecological enlightenment". On the other hand, the "doomsday vault" represents a variant of the widespread belief in an inevitable environmental decline before a subsequent recovery.

It seems that it is exactly its potential for such ambivalent and even contradictory narrative framings that makes the Svalbard Global Seed Vault an easy to use cultural tool for converting the Arctic from a dystopian place into an ideal materialisation of global environmental hope.

MATTER, MEANING, AND THE CLASSROOM: A CASE-STUDY

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The fact that there are many very different relevant theoretical approaches to the question how the relation between matter and meaning can be understood is not just a challenge to researchers, but also to teachers dedicated to teaching the environmental humanities. Because of the sheer philosophical or scientific complexity of most approaches, teachers will have a difficult time deciding whether they will present a variety of, perhaps conflicting, interdisciplinary approaches, or whether they will offer their students one consistent theoretical frame instead. Another problem is that the institutional context may not be favourable to the teaching of the relation between matter and meaning in its full complexity. This paper hopes to contribute to a discussion about the pitfalls and best practices of teaching a key-issue in the environmental humanities. It is based on an experimental, co-taught course entitled Matter and Muck, which was part of the 2013-2014 Research Master program Arts and Culture/ Literary Studies of the University of Leiden, Netherlands. One of our points of departure has been dark ecology's suggestion to acknowledge the unpleasant shapelessness and meaninglessness of our material surroundings. We opted, however, for a radically interdisciplinary approach. (Deleuzian) new materialism rethinks matter within the frame of a non-transcendental ontology; while matter does not have a fixed identity (and therefore exceeds discourse and fixed meanings), it is the site of potentiality, that is, the unfolding of possibilities. Lacanian psychoanalysis theorizes materiality in rela-

tion to the concept of the Real. Language, discourse and meaning are predicated on the subject's transition from the Real into the Imaginary and the Symbolic order. However, as Slavoj Žižek has it, the Real will return to disturb the precarious structure of meaning, while it is on the other hand also the very support of the Symbolic order. Finally, the life sciences inquire into the nature of the materiality of living organisms; their research of its semiotic interactions with its environment invites yet another way of thinking the relation between meaning and matter. Bio-artists respond to their inquiries in ways that exceed the theories we offered. To avoid offering a starkly reduced version of these theoretical approaches, the course was taught by two teachers with different specialisms (philosophy/life sciences; cultural analysis/psychoanalysis). To bring out the social relevance of the course, we invited artists and visited exhibitions. After the theoretical introduction in the above approaches and debates, the students were asked to create a virtual exhibition of art works and performances relating to the topic, and write a contribution to the catalogue. My paper will give a short overview of the results, and comment on the theoretical and analytical difficulties our students encountered. This will allow me to reflect on the challenges of teaching the theories relevant to the environmental humanities, and point at some possible ways to deal with them.

GHOSTS, POWER, AND THE NATURE OF NATURE

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"Just as no master painter is so skilled at his craft as to be able in one sketch to portray everything that is internal and invisible inside a human being, the secrets of the earth's crafting and its invisible filling and nature will never be explained by observing its external appearance."

This was written in Iceland in the spring of 1644, by a 70-year-old, self-educated farmer, poet, writer, historian, artist and sorcerer, Jón Guðmundsson, nicknamed "the Learned" (1574-1658). Molded by the multifaceted literary culture in Iceland, a culture rooted in medieval literary activities and kept alive partly by lay autodidacts who supplied even learned scholars with texts and stories, Jón the Learned was an avid collector of knowledge, seeking books and stories wherever he went.

Early in his life he was a fisherman and a farmer, but after writing a critical account of the brutal slaying of 30 shipwrecked Basque whalers in the fall of 1615 – in defiance of the county magistrate, a rich landowner who led the slayings – he was persecuted for a few years but found shelter in another part of the country. In 1627 he was accused of running a school in sorcery and in 1631 he was exiled for having written a booklet describing occult practices. He fled to an island off the northeast coast of Iceland, but managed to travel to Copenhagen in 1636. He was interrogated by the consistory of the University of Copenhagen, who recommended that his sentence be reconsidered. Nevertheless, back in Iceland, his exile was confirmed

in the spring of 1637. He was allowed to live out the rest of his life in eastern Iceland, where he wrote most of his surviving works.

Despite these hardships Jón the Learned left behind remarkable and varied writings. His works preserve many different kinds of knowledge and lore, recount the annals of Greenland, include an autobiographical poem and poetry for driving ghosts away, and not least of all, give the first description of Icelandic nature in the vernacular. His texts reveal his interesting cosmology and include mystic descriptions of the highlands of Iceland, as well as of the interior of the earth. Jón the Learned was persecuted for long stretches of his life and constantly faced censorship and the pressure of religious dogma, and his works are but glimpses and fragments of ideas and knowledge that he never had the opportunity to present systematically in writing.

Jón the Learned lived at the intersection between the old organic world view and the new, ascendant, mechanic frame of mind, and his works as a whole can be interpreted as constant attempts to grasp and understand the natural world of which humans are a part. The quotation above reveals his conception of nature as complex and out of human reach – perceivable only by God. Rather than framing nature, he led an interrogative dialogue with it and the ideas he extracted from his reading sometimes appear to be only a few steps away from Spinoza's naturalization of God.

The paper will analyze Jón's conception of nature and his world view – rooted in the medieval frame of mind and medieval Icelandic writings – in the light of current, ecocritical, ecosemiotic, and posthumanist theories. His works have a semiotic diversity that can be contrasted with the narrow, Cartesian rationalism dominant in modern Western cultures. The paper is in this respect a treatment of seventeenth-century attempts at the cognitive framing of nature.

THE BIOCULTURAL TURN IN ECO-FILM STUDIES

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The turn towards 'biocultural' and 'new materialist' paradigms in recent eco-film studies is opening up new areas for research. In a 2013 essay in *ISLE*, Adam O'Brien cites the 'new materialist' approach of Jane Bennett as a productive one for film studies, and analyses the role of non-signifying objects in film, giving as an example the American flag that appears at the end of *Nashville* (Altman, 1975). In 'Toward an Ecology of the Arts' (2013), Joseph D. Anderson draws on ecological psychology, which argues that 'perception is direct and noninferential' (80), to propose an ecological paradigm for cinema studies that concentrates on the non-cognitive affect that films have on their viewers.

What the broadly materialist approaches of both O'Brien and Anderson have in common is a tendency to downplay alternative approaches that are concerned with film as signification. O'Brien is interested in how materialist analysis 'can diverge from allegorical and thematic interpretations, giving rise to different – and perhaps contrary – insights' (266). More broadly, and following the trend towards 'post-theory' popularised by David Bordwell and Noël Carroll, Anderson argues that an 'ecology of the arts' has no place for the 'Grand Theory' of Marxism and psychoanalysis. Yet a properly holistic approach to cinema should study films as cultural artefacts that work both cognitively and affectively on the viewer, and this will necessarily include thematic interpretation and attention to signification more generally. Anderson studies cinema as a signifying practice in

which film viewers draw on processes of 'ecological perception' which they share with other animals, whereas a Peircian semiotic approach shows films to be composed of verbal and non-verbal signifiers, as well as areas of a-signification. Textual hermeneutics, including the allegorical, thematic and ideological analyses derived from psychoanalysis and Marxism, will remain an important part of such a broadly inclusive, materialist approach to film.

MEDITERRANEAN ECOCRITICISM, OR, A PRAISE OF THE IMPURE

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A sea defined by its relationship with the land, the Mediterranean is the cradle of modern natural-cultural imagination and discourses. A Mediterranean ecocriticism, however, is something more than a literary travel across picturesque areas of the planet, in search of ancient glories and of "traces on the Rhodian shore." Rather, a Mediterranean ecocriticism is the exploration of the main intellectual categories that this historically and geographically "impure" sea/land – with all of its innumerable encounters of elements, cultures, societies, and bodies – brings in the general discourse of ecocriticism. Among these categories, hybridity, along with "Mediterraneanism" (a "proximal" version of Orientalism), is the most relevant one. Reflecting on the experience of a special issue of *Ecozon@* expressly devoted to this topic, which I have recently guest-edited, I will sketch in this paper the coordinates of a "Mediterranean Ecocriticism." My proposal will be that of pathway toward a "post-terrestrialism" in which the material-conceptual dynamics of land and sea, like all the different forces involved in this naturalcultural scenery, co-emerge and co-evolve.

LEVERAGING NATURE

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By "framing Nature" we refer to the subjective structuring of the world. Effectively, this structure is the especial perspective that defines, and is defined by, living things acting in the world: a reciprocal condition of an individual affecting its environment and the affect of the environment on the individual. Another way of considering this "frame" is the niche each individual resides in. An organism's niche is a condition effected, on the one hand, by the organism's perception, whereby it frames the world (Uexküll 1934), and on the other, external perception of the former acting in the world: i.e. that a niche, and an organism that inhabits it, is observed.

The niche of an organism is meaningful because, being affected by the organism and its interactions, it has purpose. Established through agency, a niche represents an organism's frame of reference. In other words an organism's niche articulates it's sense-making. That the world makes sense, effected through a process of sign action whereby one thing means something to another, for some purpose. To an outside observer this is a process which can be bent and leveraged for other purposes. The re-framing of one organism's sense-making by another is evident in the natural world: otherwise referred to as symbiosis. For human beings this capacity is elevated. The capacity of the computer to simulate natural systems, and artificial life, as the manipulation of signs par-excellence (Emmeche 1994), enables the bending of one organism's sense-making to specific purposes. As such the

sense-making aptitude of one organism may be driven spatio-temporally to (i) investigate the capacities of the system and (ii) to capitalise on the subject's teleological behaviour as a means to problem solve (Bullock, Ladley and Kerby 2012; Liu, Tsui and Wu 2001).

Sense-making is the result of interaction, which may be effected either as a response to or in anticipation of some external event. The latter is the ability to (successfully) predict a future event. It is an abductive process. It is the spatio-temporal projection of the individual's current course to predict and thus manoeuvre into a desired, or satisfactory, condition – to sense the environment in such a way as to act on it in a manner that expects the present. Computer models that model natural phenomena model responsive behaviour. They do not articulate anticipatory behaviour. This paper will (a) examine the capacity to simulate and thus leverage the sense-making abilities of natural systems to drive their purposeful behaviour, with a view to bending it to problem solving purposes, and (b) reflect on the issue of anticipatory behaviour and modelling an autonomous computer agent that exhibits anticipatory behaviour. The latter is deemed of significance for without anticipation our models remain deductive or inductive logic machines, and if we are to understand sense-making we have to model abduction.

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HISTORICAL ACCUMULATION AND SEMIOTIC ACCESS

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"No meaning without a frame." With this mantra in mind we can certainly investigate the types of frames through which humans have been viewing the natural world and the consequences of such frameworks, whether ecological, economic, or social. I would like to take a different approach, however. I would like to investigate how the natural world has produced beings with conscious awareness, a unified experience and a rich sense of self, such that those creatures can have a frame on something like 'nature'. By re-imagining consciousness and personhood, can we re-imagine the living world and our entanglement within it?

In this work, I will place biosemiotics and systems biology in conversation with two unlikely philosophical sources in order to re-imagine the nature of conscious experience and how it fits into the rest of our scientific knowledge of the world. First, I will work with the discursive philosophy of Michel Foucault and his notion of the statement (l'énoncé) as I argue for how whole systems can themselves function as components of other systems in a non-reductive way. By making this comparison, I will also show how this development functions in a semiotic fashion and is asymmetric, that is, constituted by ruptures rather than following overarching patterns. I will use this discussion to introduce semiotic relevance and semiotic access, and the connections these concepts share with semiotic niche construction and Peirce's notion of degenerate signs.

Next, I will engage the thought of Japanese philosopher Nishida

Kitarō in order to show how these systems can offer themselves to novel semiotic interaction. Nishida uses his notions of historical body and expressive activity to illustrate how the world is both historical and expressive in the present moment. He does this by arguing that both living and non-living aspects of the world are expressive because they are historical. What the living and non-living aspects of the world express is their embodied history, which we can conceive on a human level as dexterity and skill. The expressivity is proportional to the depth of historical accumulation, and, I will argue, also proportional to the semiotic complexity of such accumulation.

By bringing these two thinkers into this discussion I will add some new language to the biosemiotic project and point to further avenues of inquiry into subjectivity and the development of consciousness. What will emerge from this work will be a sense of the living and non-living world as expressing a historical depth through bodily entanglement. This project will provide us with a frame for viewing the natural world, ourselves included, with a profound new ethical and aesthetic appreciation.

IN SEARCH OF DEEP FRAMES IN THE COMMUNICATION ABOUT NATURE IN THE NETHERLANDS

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In communication framing plays an important role. Humans frame nature through visual representations, through the language they use to describe it, and through the stories they tell about it. In my PhD research I investigate the frames embodied in the communication regarding nature in the Netherlands. I'm doing this by analyzing the representations, or views, of nature expressed in the Dutch nature policy and in the communication about Tiengemeten nature preserve.

What people or organizations say, write and depict of nature conveys their views of nature. In the Dutch discourse views of nature are mostly conceived as socio-cultural constructs regarding the character (cognitive dimension), value (normative dimension) and appreciation (expressive dimension) of nature. The cognitive dimension pertains to knowledge of nature. The normative dimension refers to our relationship to nature and the moral status we ascribe to nature. This dimension also pertains to the ethical criteria regarding our dealings with nature;

which behavior with respect to nature we find justified or not. And finally the expressive dimension concerns the way we experience nature, aesthetically and emotionally. Views of nature tell us how we perceive nature and how we want to relate to it. Likewise they 'organize' our preferences for certain types of nature. In this paper I argue that views of nature function as frames and hence as a deposit of meaning. Frames lead peoples' thoughts and discourses by presenting something in a particular way and attributing meaning to it. In other words, to interpret something as meaningful, for example our experience with nature, we need to connect it to a frame within which it can begin to make sense.

Among views of nature we can distinguish different layers of experience and reflection that can be identified in the communication about nature. To identify and clarify them it is helpful to distinguish between surface frames and deep frames. Surface frames function at the level of our daily language. For surface frames their semantic meaning is foremost; for example, the words 'dark wood' in the first place have a descriptive meaning for a certain type of wood and 'wilderness' refers to a rough place. Through their immediate meaning surface frames identify the context of the discourse. However, these surface frames appeal to underlying values and convictions that can be communicated in deep frames and they ground our daily language in our normative convictions regarding the world and our lives. The frame 'dark wood' is easily associated with feelings of fascination, fear, initiation into a numinous reality, etc. The frame 'wilderness' mostly has the connotation of pristine and real nature, nature as it originally was before it was affected by humans. Deep frames articulate our worldviews and are more fundamental than surface frames. Deep frames provide the 'framework' we need to interpret something as meaningful. In this paper I argue that deep frames provide an interpretive and reflective context for our experiences with nature that justifies referring to views of nature as articulations or stories of meaningful experiences.

POLLUTION'S VILLAINS, VICTIMS AND VINDICATION IN *DOCTOR WHO*

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Environmentalism, as a modern reaction to perceived failures of the human-nature relationship, has a complex history. Scholars often pinpoint events in the 1960s and early 1970s as crucial to the formation of contemporary environmentalist thought, such the publication of Rachel Carson's *Silent Spring*, the Torrey Canyon oil spill of 1967, the Earthrise photograph from the moon taken in 1968, and the first Earth Day in 1970. Although these may be some of the most visible roots of the modern environmentalist agenda, new environmental concerns have continued to appear, taking over as the key green issue of the day, as we see in contemporary climate change discourse.

The British science fiction television series *Doctor Who* has provided an excellent opportunity to trace the cultural resonance of environmental issues since 1963, when the show first aired. The long-running nature of the show operating within the same basic premise – a Time Lord from Gallifrey called simply the Doctor journeying through space and time with companions and often having adventures on Earth or with humans elsewhere – has permitted chronological approaches to the show's environmental discourse. Previous scholarship on *Doctor Who* in this vein has argued that the series reveals increasing resignation towards chronic environmental problems.

In this paper, I argue that the environmental plotlines in *Doctor Who* can be read as a commentary on the type of environmental threat

rather than as decreased environmental interest or resignation over time. Instead of reading *Doctor Who* as a linear regression of environmentalism, I use the series to reveal an ongoing struggle against different types of pollution, some of which emanate from an identifiable villain with targeted victims and some which do not. This is based on an anthropological approach to pollution proposed by Mary Douglas and Aaron Wildavsky, which asks four questions for understanding the construction of pollution in a particular situation: "What is the damage? Who did it? Who are the victims? How to purify?"

Using these four questions, this paper proposes that dissimilar types of pollution force the Doctor to respond in different ways, and these are not easily reconcilable with an environmentalism timeline. By examining what the Doctor does and does not do in a fictional setting, the paper gives insights into how the non-fictional modern Western world constructs the notion of pollution and responds to it.

MAZES AND LANDSCAPE GARDENS AS CULTURAL BOUNDARY OBJECTS

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Despite their obvious functional and stylistic differences, hedge mazes and English landscape gardens have salient symbolic and structural similarities which make them fruitful objects of comparative analysis. Both invert the norms expected of interior and exterior spaces, of human cultivation and "wilderness", creating landscapes of semiotic uncertainty which are at once uncanny and enchanting. Using Juri Lotman's notion of hybrid and transitional objects characteristic of boundary mechanisms, this paper explores the semiotically dense nature-culture boundary which these mazes and gardens both inhabit and create. The objects of our analysis are 17th century English mazes and early English gardens dating from the beginning of the 18th century: mazes at Longleat and Hampton Court, landscape gardens such as Rousham and Stowe, and a garden at Blenheim in which both types of special arrangements coexist.

The hedge maze appears as a boundary object par excellence: it exists as an "inside", a feature of cultivated human garden spaces and replica of the corridors and walls of interior human habitation; and as "outside", in its location literally out-of-doors, in the "open air". It is at once natural, being composed of plant material, and radically unnatural,

requiring dedicated human intervention for its construction and maintenance. It is a problem to be solved, yet is created from the material of a nature that offers no such puzzles with predetermined solutions. The landscape gardens in this study each resemble a maze or incorporate "wilderness" – a feature which shares with garden mazes substantial characteristics of uncertainty. By creating a space which is challenging to interpret and conceptualize in the form of a mental map, both structures play with the notions and signs of nature and culture, interior and exterior, transgressing these divisions while still reinforcing them.

Being at once natural and cultural, both types of space present a "problem to be solved" either by reaching a center or understanding a layout. Both "play" with the notion of boundary by constructing uncrossable and at times oppressive walls from seemingly fragile plant matter, or by hiding their boundaries with the use of a ha-ha (a hidden ditch or a slope used in landscape gardens instead of fences or walls). At the same time there are important differences which make this comparison of boundary spaces even more interesting: hedge mazes and landscape gardens are distinguishable by their respective structural levels, the presence or absence of a center, their relation to other parts of gardens and connected human habitations. Mazes and landscape gardens, as complex cultural boundary objects, can also be shown to link the problem of boundaries and border spaces with questions of power relations and the role of the individual in framing natural and cultural spaces, and the borders between.

AN OCEAN OF WORDS

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Sea levels are rising. Species extinctions have reached an alarming level. Islands are not only biodiversity hotspots anymore; unfortunately they have also become hotspots for loss of biodiversity, natural and man-made disasters, and homogenization of cultures. Literature has always played a crucial role in depicting current political, social, historical, and environmental issues. Creative thinking, empathy, and justice are made manifest in literature and help to deal with crises. It seems that now more than ever, literary texts should receive special attention in their treatment of these issues.

The human experience of life on an island, the ocean surrounding it, and oceanic change manifests itself in various ways in texts. The aim of this paper is to investigate how writers and their texts are framed by the ocean. Ecocriticism tends to focus on the terrestrial environment and human encounters with it. This paper seeks to explore humans' encounters with maritime environments by imploring "blue" or oceanic ecocriticism in a close reading of recent Caribbean and Pacific literature. A reading of a few selected texts by female Caribbean and Pacific writers puts an emphasis on the emerging field of "blue" and postcolonial ecocriticism and aims to highlight the importance of comparative, interdisciplinary work and the environmental humanities.

A selection of texts from both big and small Caribbean and Pacific islands helps to demonstrate how environmental issues concerning the ocean are treated in the same, similar, or completely different ways

in these regions. A comparison between regions as well as within regions offers an important further dimension to this paper which is part of a larger dissertation project. In all the texts, local natural histories, nature representations, and local knowledges are greatly influenced by living on an island and close to the ocean. A close reading and analysis of the chosen texts will be supported by employing some concepts of island studies.

The elusive and threatened *grenouille du sang* (*Eleutherodactylus sanguineus*) is at the center of Mayra Montero's novel *In the Palm of Darkness* (original title: *Tú, la oscuridad*). This novel, set in Haiti, has been called the first environmentalist novel of the region. The novel's treatment of the disappearance of this type of frog and the interwoven passages about global amphibian extinctions offer a valuable contribution to giving amphibians a voice. In the novel, the ocean and water on the island function as indirect framing devices and are linked to the tragic ending of the story. In her short story collection *This is Paradise* (2013), Hawai'ian author Kristiana Kahakauwila highlights the central role the ocean plays in both locals' and tourists' lives. I argue that framed by oceans, particularly storytelling and local knowledges form an invaluable tool to raise environmental awarenes.

AGAINST THE FRAME

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The paper will explore the theoretical foundations of the frame from two semiotic perspectives: that of the Saussurean dyadic sign dominant in the European tradition and that of the triadic sign of the Peircean/American descent. If –within the post-Saussurean agenda– meaning can be fairly easily "framed" and closed in the field of the signified, Peirce's concepts of interpretant and infinite semiosis implement a mechanism which inherently obliterates the frame. Given this duality of approaches, the contention that seems to constitute the foundational deep structure of the conference – "No meaning without a frame" – is thus true and paradoxical at the same time, and that paradox goes far beyond the Derridean concept of the *parergon*, which only *belongs* to both the inside and the outside. The frame, as construed in this paper, is not merely a material or imaginary, inactive partition, but is itself an operational agent which isolates and delineates an object ontologically as the other of the context/environment and simultaneously subverts that otherness by necessitating further semiosis and its own partial self-erasure. On the global scale, regarding the interrelation between the human subject and nature –and on the smaller scale regarding the interrelation between an object and its context– the frame will thus be envisaged, and investigated in the paper, not so much as a factor of resistance or separation, but as an osmotic boundary facilitating rather than preventing a bi-directional flow of meanings. Putting

this in epistemological terms, one may say that interpretation – paradoxically again – requires an enframing of its object, but at the same time it dissolves the stipulated frame and reaches beyond it.

THE NATURE STUDY IDEA: FRAMING NATURE FOR CHILDREN IN EARLY TWENTIETH CENTURY SCHOOLS

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A new subject, Nature Study, was introduced to elementary school curricula throughout the English speaking world in the early years of the Twentieth Century. Featuring as an important component of educational reform, Nature Study was supported by a considerable body of theoretical and practical literature. Its subject matter introduced plant, animal, and geological studies to even the youngest children in elementary or primary schools. Methodology was crucial to its definition, with observation from actual nature, self-activity, questioning and reasoning replacing older methods of passive rote learning. The concept of adaptation, and the interdependencies of nature, being concurrently defined within the emerging field of ecology, explicitly informed the texts of Nature Study from its early formulation in the 1890s.

Nature Study introduced natural science to school children, science which stressed observation and reasoning through "the seeing eye and the thinking mind." But Nature Study differentiated itself from elementary science by its embrace of aesthetic appreciation and an aim to foster an emotional response to nature, often referred to as "sympathy with nature." These three distinct aspects of Nature Study clearly and consistently defined the subject, at the same time providing what may be seen as a particular frame for children to regard nature. Amongst its diverse aims, Nature Study included a conservation ethic: as children came to understand nature, they would want to care for and protect it.

In the state of New South Wales, Australia, Nature Study was introduced to the new syllabus of 1904 as required teaching for all classes of the centrally administered public elementary schools. Various types of evidence allow the historian to examine Nature Study in practice. Rare examples of children's writing about nature provide one way of approaching Nature Study, and its particular frame for regarding the natural world, in practice. These examples demonstrate that teachers could convey and children absorb a study of nature that was concerned at once with scientific observation and reasoning, aesthetic appreciation and the fostering of a caring affinity with the natural environment.

NEW MATERIALISM AND LITERARY FORM

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Some recent developments in ecocriticism converge upon the idea that ecological perception must dissolve unifying notions of selfhood and strong dualistic separations between culture and nature, subject and object or human and nonhuman. Instead, we must perceive shared ancestry, co-evolution, system, process, energy flow, hybridity, actor-networks, post-humanism, symbiosis, biosemiotics and the continuous mutual constitution of self and world: the system of relationships that Timothy Morton calls 'the mesh', New Materialist theorists call 'distributed agency' and Karen Barad calls 'intra-action' and 'agential realism'. What is advocated is a shift of emphasis in the way we imagine the self, from the self as an atomised individual with hard-boundaries to a self always already in the process of producing the world and being produced by it; a self through which the world flows; a self that is as conceptually inseparable as it is materially inseparable from the larger ecosystem that sustains its physical body.

Paradoxically, these ideas exist as yet mainly in the form of abstract theoretical reasoning. What literary forms can they take? Specifically, what new forms of literary subjectivity, narrative viewpoint and literary emplotment are required to do justice to these conceptual shifts? I find pointers in two pieces of writing that seem at least momentarily to combine the theoretical and the creative. Catriona Sandilands, in Alaimo and Hekman's *Material Feminisms* (2008), tells a story of her mother's struggle with Alzheimer's dis-

ease. Sandilands is concerned with the materiality of memory:

> A memory traces an electro-chemical pathway from neuron to neuron (called an engram); no two memories follow the same path, and the more often a particular route is followed, the more chemically sensitive particular neurons become to one another. I find this idea quite extraordinarily beautiful: in the act of remembering something, the world is, quite literally, written into our brain structure.

But how is such knowledge to be incorporated into narrative?
In his *Cambridge Introduction to Literature and the Environment* (2011), Timothy Clark begins to imagine a description of swallows by Richard Jefferies as it might be rewritten under the influence of New Materialism and biosemiotics:

> Might it be a matter of writing not 'he … reached the end of the lane and rose over the gate into the road – not a moment's pause before he had made the leap over the gate to see if there was a wagon or not in the way' but somehow of a multiple happening of relations in which definitive concepts of 'lane' and 'gate' do not exist, but instead a transitory and changing constellation of percepts, hunger and muscular flexing, metamorphosing itself as a variously focused assemblage of co-ordinations and impulses?

As New Materialists would put it, the agency that we conventionally attribute only to the bird would be redistributed to all the elements of the material force-field, or the ecosystem. Taking what cue I can from these two fascinating beginnings, I will look for further examples of the incipient material-discursive in nature writing, contemporary fiction and contemporary poetry.

NARRATING FLUID FRAMES: AFRICAN AMERICAN ENVIRONMENTAL KNOWLEDGE AND THE FUNCTION OF RIVERS IN ZORA NEALE HURSTON'S EARLY SHORT FICTION

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Against ecocriticism's initial tendency of ignorance towards African American texts (only recently major exceptions can be found in Smith 2007; Outka 2008; Finseth 2009; Wardi 2011), my paper draws attention to the environmental dimensions and implications of three early short stories by Zora Neale Hurston. More precisely, I focus on the narrative and discursive function of rivers, as expressions of an African American "environmental knowledge."

Hurston's texts exhibit streams of water not merely as background or framing devices but as central narratives in and of themselves: In "John Redding Goes to Sea" (1921) and "Under the Bridge" (1925; rediscovered in 1997), rivers figure as liberating agents for their protagonists rather than being static sites or local color. "Magnolia Flower" (1925) goes even further in giving a fictionalized "St. Johns River" a voice as narrator framing a fugitive's tale. Thus leaving streams "flow" not only through diegetic space, but radically on the boundaries between *histoire* and *discours*, Hurston's literature can be read as critiquing the assumption of a (seemingly) objective human observer position underlying various mainstream academic and popular discourses of her day: In the legacy of John Wesley Powell and Louis Agassiz, as well as often still infused by social Darwinist ideas, the observing subject in its verifiably knowing the world is here often both deliberately anthropocentric as

well as highly racialized. Hurston's river-stories, by contrast, fundamentally resist this dominant poetics of knowledge, bearing the potential of an alternative positioning. Foreshadowing Hurston's own anthropological stance as a disciple of Boas, they deconstruct the centrality assigned humans as faithfully grasping the world and undermine the monopoly of an objectifying (white) gaze. Instead, they suggest an interconnectedness of multiple, human and non-human, entities engaged in rhizomatic networks of perception and agency.

Thus verifying Hurston's texts as fundamentally "environmental" (Buell), my paper not only adds to existing Hurston scholarship and argues for further including her writings in ecocritical study. Moreover, Hurston's strategic employment of rivers also more generally points to a distinct environmental ethos and epistemological relation to the non-human world in African American literature, which remain yet to be more thoroughly explored in their dynamic interaction with and in contrast to dominant American (literary) discourses.

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PFISTER'S SPILL? NARRATIVES OF FAILURE IN AND AROUND WILHELM RAABE'S 1883 ECO-NOVEL

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The German Duchy of Brunswick in the early 1880s: as a result of the increasing presence of sugar refineries, a number of former lively mill creeks are turned into a sewer system, their flora and fauna declining. Unfortunately, this pollution remains not only as an ecological disaster, but manifests itself as a severe health and social problem as well. Residents are forced to leave the region, as the pollution of their livelihood becomes unbearable, while undermining their economic existence.

Exploring the challenges of the transformation of the young German Empire from an agricultural to an industrial society, Wilhelm Raabe in his classical novel *Pfister's Mill* (1883) showcases the struggles of the lower classes with socio-ecological problems within their Lower Brunswick environment. Texts such as Raabe's seem to offer an idea of contemporary perception of these fusing societal and ecological challenges. But more importantly they outline the failure of nascent societal resistance against these challenges, due to the scaffolding provided by the socio-natural sites of their emergence.

Building on the concept of socio-natural-sites, as defined by Winiwarter & Schmid (2008), this paper seeks to explore the different layers and contexts of failure underlying the novel's narrative, which become beautifully visible in the historical context of Raabe's work. Being defined as a result of practices and their material precipitation, socio-natural sites also encompass changes in the living environment,

while specific arrangements of humans adjusting have in return to be seen as their material result. Consequently, practices are constructed by practices of perception, which leads to their representation through communication. This paper will argue that social novels, such as *Pfister's Mill*, provide invaluable insights into the means of construction and the social perception of these sites. Transforming the perceptions of sensual experiences in a culturally communicable content, while being such themselves, these novelists' descriptions also hold inspiration for solutions and potential as a force in shaping the socio-natural site itself. The failure of these intents, it seems, is not only to be understood in Raabe's own view as a personal failure, but as an integral constituent of political ecology in the late 19th century.

NATURAL AND CULTURAL HERITAGE: FRAMING MEANINGS AND PRACTICES

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The two largest metaphors around which we create a network in order to provide our lives with meaning are nature and culture. In order to preserve natural and cultural environments suitable for humans, both cultural heritage protection and environmental protection play an important part. Both natural and cultural heritage protection as specific institutions emerged in the second half of the 19th century. Traditional natural heritage first and foremost meant protecting wild nature from human activity. Wild nature was represented in the contemporary world by objects that amazed humans by their beauty and power. Originally this signified protecting single natural objects, especially in Europe. Different natural objects were taken under protection: outstanding trees, groves, erratics, rare species of plants and animals, unique and beautiful forms of landscape (mountains, terraces, springs, caves, and waterfalls). Later, instead of natural objects, habitats and ecological systems became the subject of protection. Contemporary environmental conservation connects the protection of habitats, biomes, species and landscapes into a consistent protection of natural diversity and ecological systems.

The so-called expansion of borders is happening both in heritage and environmental conservation. What used to be two separate fields have begun to overlap on the edges. Environmental conservation treats cultural objects as heritage. Heritage landscapes, parks, etc. are

considered as parts of cultural heritage. We have to admit that a large part of what is being considered natural in fact originates from culture. Human activity has shaped the whole Earth. Both the natural environment and "nature" treated by humans are in constant change. On the one hand, nature is a term used in the framework of a certain discourse but on the other hand, it also simultaneously signifies something crucial to our existence. Intervened nature and culture have created a whole new environment in which we have to cope as equal participants. Instead of one-sided relations, be it human activity that is harmful to nature, or nature's power over humans, we need to deal with a complicated dialogue, which presumes both understanding and listening. Treating nature as a part of cultural heritage offers new ways of perceiving relations between humans and nature. In protecting nature, perhaps it should not be treated as a separate entity that has independent value. Cultural heritage conservation shows that including nature into the semantic fields of culture does not bring about any problems regarding environmental conservation. In order to combine natural and cultural heritage, the corresponding conceptual models should be brought together. Treating nature as a part of cultural heritage would, in my opinion, provide a different and perhaps also significant way of perceiving natural heritage conservation.

CZECHING AMERICAN NATURE IMAGES: ROBINSON JEFFERS' ENVIRONMENTAL POETRY IN COMMUNIST CZECHOSLOVAKIA

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While Robinson Jeffers fell out of favor with American readers and critics in the 1940s, he was the most popular American poet in the Communist Czechoslovakia of the 1960s. His verse influenced a whole generation of young poets. Jeffers' Czech translator Kamil Bednář believed that the poet's outstanding reputation in Czechoslovakia had to do with nature. First, Bednář underscored "the role of the scenery of the Pacific and the wondrous Big Sur which has enormous charm for the Czech reader". Second, he points out the significance of the "return to Nature," which he regards as an antipode to the "contemporary civilization". Bednář does not develop his observations much further. This paper aspires to elaborate on these points with respect to both the physical and the metaphysical dimensions of the expression nature, as they are vaguely distinguished by Bednář. It aims to trace the shifts and changes in the meaning of the fundamental nature images in Jeffers' poems as they were transplanted from the United States to the unfree conditions of landlocked Czechoslovakia. The images/symbols in question include tree, beast, rock, ocean, and mountain.

In Communist Czechoslovakia of the 1950s, nature poetry was a marginal genre as the dominant and official poets composed paeans to the new socialist order. The socialist order took little, if any heed of the environmental order. The prevalent technocratism found its most flagrant expression in the so called socialist novel which glorified the

accomplishments of the new order (i.e. socialism), namely the reopening of coal mines and factories after WWII, the construction of gigantic dams, the nationalization of industries, and the collectivization of privately owned land in the countryside. It is not by chance that tractor came to be perceived as a powerful ideological symbol of the era of socialist realism. Regarding poetry in the 1950s, it also sang paeans to the social(ist) progress. It celebrated the hard-working socialist hero and their capacity to subdue nature.

It is thus no wonder that Jeffers' verses, free of socialist zeal, direct and accessible unlike the jargon of the official literature and the state-controlled media, featuring untamed nature as a living entity, were viewed as a revelation by many readers. They were captivated by the fact that nonhuman agents figured as protagonists rather than just a backdrop in Jeffers's writing. Needless to say that that this take on the relationship between humans and nature was not in accordance with the dominant literary stream in Czechoslovakia of that period. It was this unusual shift in emphasis, this "unhumanizing" and somewhat exotic trait of Jeffers's poetry that enchanted readers in one of the most humanized land(scape)s on the globe, in Czechoslovakia. To American readers, the stark contrast between the "savage landscape" of the Jeffers' Country and the cultured landscapes of Central and Eastern Europe, including Czechoslovakia, is best captured by Czesław Miłosz who discusses the antithetical landscapes in his essayistic tribute to Jeffers "The Edge of the Continent" (1998).

MAKING SPACE ALONG THE KEMI RIVER: A FLUVIAL POLITICAL GEOGRAPHY IN FINNISH LAPLAND

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This presentation illustrates how the flow of the Kemi River, the largest watercourse in the Finnish province of Lapland, participates in making space in the region. Analysing place names and riverbank inhabitants' senses of direction, it suggests that the general upstream-downstream distinction experienced in people's everyday engagements with the river has been mapped on a range of other classifications, including the directions of the compass, place and family names, and ideas about economic development. Upstream is generally associated with north, tradition, wilderness and underdevelopment, while downstream means south, modern lifestyles, urbanity and economic development. The flow of the river and its tributaries has also inspired the spatial extent of various political units, as separator or integrator depending on the respective way of relating to the watercourse.

Engaging Doreen Massey's treatment of space as "stories so far" – continuously constituted by dynamic and evolving relationships – and Ulrich Ostlender's concept of "aquatic space" – the coinciding of river courses and social cohesion – with Tim Ingold's perspective of places and relations constituted by the entanglements of growing lines, this presentation argues that central Lapland has been for its inhabitants as much of a "fluvitory" as a "territory". Space has been made, and to a limited extend continues to be made, in relation to water flows as much as by reference to terrestrial formations. With

the spread of mechanisation and road-based transport infrastructure, the area's fluvial topology has been sidelined considerably, but continues to linger in people's minds, stories, maps and bodily memories. The material indicates that framing and experiencing space go hand in hand: the frames that guide people's activities in and thinking about the landscape are themselves shaped by the affordances the landscape provides for people's thoughts and activities.

ANIMALS AS 'NATURE IMAGINARIES' AND THEIR DEPICTION ON PRODUCT PACKAGING

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How is nature framed on product packaging? In this paper we analyse the depiction of animals on consumable goods (food, beverage, household items, etc.). On packaging, animals are depicted more frequently than other 'categories' of nature (e.g. flora, landscapes). They lend themselves to simple, yet easily recognizable, figurative depiction. Drawing on the concepts of economic (Jessop, 2004) and ecological (Gandy, 2006) imaginaries, we propose to discuss animals as a *nature imaginary*. With *nature imaginary*, the complexity and indeterminacy of nature is fixed into schematic neo-romantic figures imbued with affect, anthropomorphic features and other imagined properties.

The analysis is based on data of almost 1,000 specimens collected as part of an ongoing artistic research between the years 2008-2013. Our collection is not representative; our intention is rather to identify recurring patterns of signification. Drawing on the animal studies literature (Shepard, 1996; Baker, 2000), we then discuss how a product's packaging frames (or, rather, does not frame) the wider processes of production, distribution and consumption.

We distinguish the following types of relationship between product and animal imagery:

- animal itself is a product (tuna on a tuna can) or 'producer' (cow on a milk bottle),
- animal signifies quality, which is essential for the product (coldness: polar bear on a chocolate),
- animal signifies the location of product's origin (forest: squirrel on a toilet paper),
- animal signifies a cultural story (Tom & Jerry: mouse on a cheese).

As a signifier of the product's content, quality, location, and cultural narratives, and in its capacity to act as a *nature imaginary*, animal connotes (Barthes, 1991) the Other of the economic reality of the cycle of production, distribution and consumption. Hence a tuna fish smiles, and a squirrel evokes a living forest prior to that moment when it was cut down to make toilet paper. Some animals are wild and exotic (as we know them from documentary films), others are playful and familiar (as we know them from cartoons). All in all, animal imagery on packaging "naturalizes" in a double sense of the word: while connoting neo-romantic images of nature, it detaches the products from the social and historical reality within which they were made, bought, and eaten or drunk.

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WHY ECOSEMIOTICS

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Habits shape nature. *Umwelt*, in the sense of Jakob von Uexküll, is not just a virtual model of the world in an organism; *Umwelt* is also the complex of all sign relations of the organism. Sign relations, however, are real in the sense that they are the bonds that organise the structure of an ecosystem, of any system with life in it.

An observation described by Michael Halliday (1990: 7) that "changing language can change the existing order" led to the development of ecolinguistics in the late 1990s. Also in the 1990s, analogically, an observation that sign processes of almost any type can change the existing order, led to the development of the field called ecosemiotics.

As such, not only changes in language, but also in pre-linguistic cognitive processes, meaning sign processes in general, play a remarkable role in modifying the material world. Textualisation and narrativization, but simpler activities as well, such as recognition, signification and categorization, are not only concerned with interpretation. They also organise the system that is being interpreted, they embed the grammar into the spatial and temporal order, into the rhythms of behaviour, into the arrangements of home, garden, and landscape. The central idea of ecosemiotics is that living systems build their typologies, categories, and distinctions into their surrounds, into the ecosystem; that the categories are not located only in the head or in language, but also in the relational system of the ecosystem itself. This is because the process of modelling (as semiosis) is boustrophedonic – always

(at least) bidirectional. Modelling or meaning-making includes both perception (reflection, representation, etc.) and action (rebuilding, design, etc.). Accordingly, it is possible from the morphologies of a landscape to make conclusions about the sign types available for the inhabitant, i.e., the semiotic competence of the designer.

This paper attempts to provide a brief review of ecosemiotics as an approach that focuses on sign relations in the environmental and ecosystemic aspects of cultures (Nöth 1998; Kull 1998; 2008; Maran 2007; Maran, Kull 2014; Hess-Lüttich 2006; Siewers 2013; etc.).

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SHAPING THE HUMAN VIA CONCEPTUALIZING NATURE

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Conceptual analysis (of "nature") has two aspects: clarifying what we *do* mean by nature and what we *should* mean by nature. The latter draws upon the former and presupposes it (or else one would not be analyzing the concept but changing the topic). On the other hand, an answer to "what we *should* mean" might itself carry over into the actual practice of using the concept and thinking of the phenomena of nature. How we think of something in turn has influence on what we do. This makes the normative aspect of conceptual analysis of practical importance. My project in the paper is of the normative kind. I will first abstract two common ways of determining what counts as nature. I then draw attention to the possible socio-practical consequences of privileging one of them, while neglecting the other.

First, in the common, theoretically naive sense, "nature" is associated with what I will call "the green nature", defined as quantifying over paradigmatically "natural" objects: trees, animals, mountains etc. Paradigmatically, a kind of lawfulness is attributed to these "green" objects *qua* natural: they are seen as subject to relatively rigid, immutable and inevitable laws of nature. Second, there is the more fundamental structural dimension to the concept of nature – being different from what is "human". This relational dimension is implicit in different particular articulations of nature (including the "green nature" conception) and defines those as instances of still the same

concept. So defined, the particular content of "nature" and which particular objects it applies to is contingent on how "the human" is conceived; which is a contextually and historically fluid matter. So, for example, things that get picked out by "nature" are not always "green" in the above sense and not all "green" objects need to be picked out by "nature", depending on the particular concept of "human".

Still, in the everyday usage the label "nature" seems to be stuck to the "green" object sphere, whereas the marker "non-human" that underlies it gains little attention. Is the prevalence of this object-bound conception in public discourse desirable? In the second part of the paper I make explicit some negative implications of such focus on "green nature". My discussion will draw upon the following two aspects of the "non-human" definition of nature. First, the above described dependency of "nature" on "human" is symmetrical and dynamic: what is seen as human likewise depends on what is conceived of as "nature". Second, the concept "human" in the dichotomy is partly normative: it prescribes what is *to be pursued* as human. Hence, concepts of nature don't only exclude certain domains from the human sphere (as has been pointed out repeatedly), but also serve to maintain and *shape* human realm according to certain goals and standards. This human-creating function, so I argue, gets lost if the underlying relational *and* normative "non-human" definition is neglected. Does it matter? I will argue that it does, for it might render unnoticed the "naturalization" of the human sphere itself: parts of the social becoming, and being treated, more and more like "green nature" paradigmatically seen.

FRAMING IT IN A FOREIGN LANGUAGE: KNOWLEDGE ECOLOGIES AND THE ART OF TEACHING

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A language is not only the most important means of communication within a speakers' community. It also provides interlocutors with a key to cultural ways of perceiving the world, embedding human and non-human relationships, interpreting material as well as semiotic phenomena. If language does not passively reflect and represent the world around us but actively co-constructs the very world we perceive, then questions of foreign language education, of multilingualism and of knowledge ecologies need to be considered a lot more closely than has been done by ecocritics and environmental educators to date.

How comes that Environmental Humanities have been quite courageous in transcending boundaries between fields of knowledge and established academic traditions, yet the same Environmental Humanities seem to balk at issues that go beyond the boundaries of just one language? This talk will establish an interface between ecological/environmental research and Foreign Language Education. The focus will be directed at signs, stories and meanings that help us understand how different languages, different cultures and, hence, different peoples use to encode their experience with the non-human world. The comparatist learning of a target language from the perspective of one's mother tongue offers insights into processes of encoding one's human and nun-human environs. The talk forms an attempt to sketch the theoretical basis for teaching foreign languages from a positive and environmentally-oriented perspective.

BLACK-AND-WHITE BROADCASTING: ENVIRONMENTAL ISSUES IN FINNISH AND ESTONIAN TELEVISION PROGRAMMES SINCE THE LATE 1950S

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Many scholars have emphasized television's role in the so-called environmental awakening of the late 1960s and early 1970s. However, historical studies about the subject have been rare and very little attention has been given to the actual contents of topical programmes. This presentation aims to fill this gap. Television programmes can provide insights about the historical construction of environmental issues on the national level. Our study can be regarded as the first attempt to explore the environmental history of television programs from the point of view of qualitative historical studies. The Finnish national broadcasting company Oy Yleisradio Ab (YLE) initiated regular television broadcasting in 1958. The data gathered of television programmes broadcasted suggests that environmental issues attracted nationwide media attention from the very beginning. In Soviet Estonia, regular television broadcasting was started in 1955. Tentative exploration of television programmes broadcasted by the Estonian Television (ETV) during the Soviet rule suggests that the local reporters had capabilities to produce programmes about environmental issues but that seemingly only one notable environmental programme was

broadcast prior to the Glasnost years. However, programmes of the Finnish television were seen in the northern part of the Estonian SSR. These preliminary results suggest that environmental issues attracted nationwide media attention from the very beginning in Finland, while in Estonia television environmental programmes were heavily censored and were nearly non-existent.

'RED HERRING': AGENCY OF FISH IN THE FRAMEWORK OF ENVIRONMENTAL AND POLITICAL UNPREDICTABILITY, 1930S

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In the beginning of the 1930s, a large amount of herring appeared near the Russian coast of the Barents Sea. It was the time when the Soviet authorities urgently needed a cheap source of food, because of the beginning of hunger in the country. Herring was crucially important as a cheap source of protein, which had the advantage that salted herring was very easy to transport over large distances. Since the mid-19th century, salted herring had become a very common source of food for poor people in the cities, as a result of the rapid growth of Norwegian export, and the inception of Caspian fisheries. After the revolution the exports ceased, and the lack of herring, which had become a part of everyday consumption for many people, was widely noticed. Thus when the ichthyologist Evgenii Suvorov published a plan for increasing herring catches under the title "When will we be able to eat a real herring?" he articulated the opinion of a large proportion of Russian population. He wrote that "we have a constant urge for eating good herring which, unfortunately, for long, after the beginning of the war, did not find its satisfaction".

As a result, the sudden appearance of herring near the coasts of the Barents Sea created huge expectations for future development of herring fisheries in the North. It led to a large campaign with good media coverage. The campaign and plans to build the largest 'herring base' –

which would include a fishing fleet, processing factories, transportation – needed legitimization. The 'resource' for herring fisheries was constructed by the authorities with the assistance of scientists, and voices of the local people and scientists who articulated these voices by pointing out the fluctuations of the herring stocks in the past, were silenced. New voices which supported the official expectations appeared.

When herring suddenly disappeared after four years of enormous catches, it was the scientists who were blamed for not being able to predict this. The best research institute was closed, and many of the scientists fell under repression. This paper will show how Soviet scientists found themselves between two unpredictable forces. One was of natural character: nobody really understood the biology of herring at that time, where it would spawn and how changes in climate, with the rapid warming of the Arctic waters in the early 1930s, might affect its distribution. The second unpredictability was connected with the Soviet power which constantly changed its demands, and placed responsibilities for the economic failures on scientists.

PROTECTION POLICIES THROUGH A LENS: THE ROLE OF REPRESENTATIONS IN THE ENVIRONMENTAL PROTECTION OF JAPANESE AGRARIAN LANDSCAPES

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Environmental discourse and natural imagery hold a special place in national self-descriptions, and different visual and verbal representations of nature, that is nature through a lens or a pen, play a crucial part in establishing which elements belong to the "desirable national environment" and what parts of landscape are rather negated or ignored. Without underestimating the emotional bonds of each individual with their home landscapes, the present paper will address the role of visual (both photo and cinematographic) and verbal representations of landscapes in shaping public discourse on nature and environmental protection policies.

The discussion will focus on the representation of traditional rice agriculture landscapes at Lake Biwa, Japan, and their role in shaping local environmental consciousness and protection policies. Framing nature in beauty images has been crucial in Japanese environmental protection already from the establishment of early national parks that was carried out hand in hand with big publicity campaigns of major train companies. Well framed visual representations that cut off today's industrial or urban everyday landscapes are central to the discourse on national landscapes in today's Shiga Prefecture, where pho-

tographic and cinematographic works of Imamori Mitsuhiko have highlighted near-dissappeared traditional rice agriculture ecosystems. In a skillful montage, beautiful traditional villages are depicted as embodiments of traditional Japanese wisdom about co-existance with nature and have found ardent fans among middle-aged town people who happily immerse themselves in further "framing activities": nature walks, food tasting, ecotourism etc. "The biggest challenge was to keep garbage out of the shot," says the framer, Imamori Mitsuhiko himself about shooting "*Satoyama*", the NHK and BBC co-produced film on water cycles in traditional rice farming villages at lake Shiga. For the consumer of framed images and experiences, it is the correspondence between the first-hand experience and neat images that matters most, appears from the interviews with participants at various tourist events in traditional agricultural villages. And even though the contact of these participants with the real Shiga prefecture remains largely on the level of framed nature, thus excluding the majority of the prefecture's present reality, the conscious popularization activity of Imamori Mitsuhiko and subsequent *satoyama* boom has considerably increased the popular awareness about landscape heritage both on local and national level and has in fact helped to preserve several landscape elements that had already almost dissappeared.

POETRY AND URBAN LIFE: FRAMING AND BEING FRAMED BY BIRDS

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Coevolution is a frequently discussed term in present evolutionary sciences, often associated with the term coexistence in human-animal studies and posthumanist theory (Haraway 2008; Morton 2010). Some studies in biolinguistics and ornithology even suggest that the origins of human language can be explained in coexistential or perhaps coevolutionary frameworks (Tüür 2009; Marzluff & Angell 2012; Miyagawa, Berwick & Okanoya 2013). Accordingly, human language and literature can be assessed in a new light, not only as creations of intentional human subjects but rather as processes emerging from constantly changing material-semiotic, coexistential relations between humans, nonhumans and their environment (e.g. Bryant 2011). Moreover, following Timo Maran's ideas on nature-text, contemporary poetry could be a particular case in point with its mixed sign systems, tuned to mediate various auditory and visual elements of both human and nonhuman environments (Maran 2007; see also Maran 2010).

Urban environments are another fruitful example of human–nonhuman coexistence. As they combine various nonhuman *Umwelt*s and human-built infrastructures, cities are perfect sites for observing both intra- and interspecies communication and interaction. *Kerro* (*Tell*, 2007), a poetry collection written by Finnish poet Jouni Tossavainen, is a textual record of rich urban naturalcultural life. In Tossavainen's poetry random-looking marks, words and visual elements are grouped to-

gether to form intertwining depictions of human and avian life.

In my paper I address nature poetry and urban environments as sites of coexistence. Just as cities are inhabited by nonhumans (as well as humans), poetic texts are inhabited by thematic, visual and auditive elements originating from animal worlds. Thus *avian/human*, *natural/urban*, *auditive/textual* and *visual/textual* are not considered as dualistic or hierarchical oppositions but as hybrid conceptualizations of physical and textual coexistence. What kind of reading does this vantage point entail is the main question of my paper.

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LANDSCAPE – WILDERNESS – ECOSYSTEM: ON THE INTERSECTION OF CULTURAL GEOGRAPHY AND ECOCRITICISM

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In their recently published and highly acclaimed collection of essays, cultural geographers/historians Thomas Kirchhoff and Ludwig Trepl analyze and categorize different conceptual approaches that have been taken towards 'nature' in (cultural geography over the) recent decades. They use specific definitions of the terms 'landscape,' 'wilderness,' and 'ecosystem' to distinguish between the three major approaches that they identify as having been the most prevalent, stating that 'landscape' is connected to an aesthetic, 'wilderness' to a moral, and 'ecosystem' to a scientific perspective and approach to a particular tract of land.

Problems, they show, arise when one and the same tract of land is discussed while using different frames of reference; usually without an awareness of this being the case.

In my paper, I will use Kirchhoff & Trepl's theory to do a close ecocritical reading of select passages of Cormac McCarthy's The Road and Margaret Atwood's Maddaddam trilogy, hereby demonstrating that this cultural geographic approach to nature is something that can be fruitfully integrated into and interlaced with ecocriticism and ecocritical text analyses.

I will also show not only what ecocriticism might gain from a dialogue with this theoretical concept, but also what cultural geog-

raphy (and Kirchhoff & Trepl's theory) might gain from integrating ecocritical thoughts.

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THE PERSONS OF A GUIDE DOG TEAM: PERSPECTIVISM IN THE GUIDE DOG USERS' AUTOBIOGRAPHIES

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The co-operation of a guide dog team requires that both members of the team take into account the viewpoints of each other. This means that what the other team member is capable of perceiving, as well as accounting for the intentions, inclinations, and needs that guide perception, must be taken into consideration. The other's point of view is thereby also encompassed into one's own behavior and decision making.

That the presence of a perspective or a point of view serves as a basis for the understanding of personalities and subjects in different cultures has been demonstrated by anthropological research subsumed under the name of 'new animism' (Harvey 2006). Such observations question the universality of the largely Western assumption that the other has to be taken as a person before s/he can be addressed as a communication partner or seen as possessing a point of view. In such cases, having a perspective (Viveiros de Castro 2002, Hallowell 1960, Willerslev 2007) or possessing a character formed through the intersubjective relations (Bird-David 1999) creates a personality in the first place. Similar accounts of how a subject (both human and non-human) is formed via a point of view (Uexküll 1934) or communicative relations (Sebeok 1990), can be found in the fields of bio- and zoosemiotics.

Combining such premises stemming from anthropology and semiotics, I will analyse the building of persons in the guide dog teams' work as presented in the autobiographic narratives of guide

dog users.[1] I thereby aim at answering the following questions: how does the perspective of a non-human subject guide the activities of the visually impaired human and vice versa? Which signs are used to reach the point of view of another species? How is the perspective of a non-human subject mediated via a narrative?

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[1] Autobiographies included: Hingson, King *Thunder Dog: The True Story of a Blind Man, His Guide Dog, and the Triumph of Trust at Ground Zero*; Hocken, Sheila *Emma & I: The Beautiful Labrador Who Saved My Life*; Frank, Morris *First Lady of the Seeing Eye*; Irwin, Bill; McCasland, David *Blind Courage*; White, Betty; Sullivan, Tom *The Leading Lady: Dinah's Story*.

BIOSEMIOTIC CRITICISM: ZOOSEMIOTIC ASPECTS OF ENVIRONMENTAL MODELLING

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The presentation makes an attempt to synthesise ecocriticism, the semiotics of the Tartu-Moscow Semiotic School, and biosemiotics, in order to propose a methodology for analysing nature representations in relation to human connection to nature. The relationship between literature and environment will be described by employing the concept of modelling as developed by Juri Lotman and Thomas A. Sebeok. From this perspective, every piece of nature writing is essentially a model of human relationship with nature, both in its present state and as it is anticipated in the future (Maran 2013). In a literary work as well as in the human perception of the environment, three levels of modelling are distinguished: zoosemiotic modelling, linguistic modelling and artistic modelling. In this framework, special attention is paid to zoosemiotic modelling and for this the conceptualisations of various authors such as Thomas A. Sebeok, James J. Gibson, Michael Polanyi will be discussed.

According to Thomas A. Sebeok (1991) preverbal "zoosemiotic modelling" is based on *Umwelt* structure, where signs distinguished by the organism's sensory organs are aligned with its behavioural activities. On the level of zoosemiotic modelling, understanding of and affinity with other living beings can arise on the basis of the similarities developed in biological evolution on different taxonomic levels. Examples of such basic similarities include orientation on the vertical

bottom-up axis, which is a connecting feature for most animals and plants; or group relations and hierarchies, which is a connecting feature for most mammals. The connection between nature representations and actual environmental structures can be studied by applying James J. Gibson's (1986) concept of "affordances", which describes such properties of the environment that make certain activities possible. Gibson's affordances anchor environmental perception and representation in a particular environment through meanings and values. Michael Polanyi (1966) has developed an understanding of preverbal semiosis with the concept of "tacit knowledge", which is a sign process that integrates preverbal and unconscious biosemiotic sign processes into cognised wholes.

In nature essays, we may find traces and fragments of zoosemiotic modelling in the form of representations of inarticulate sounds, the author's bodily perceptions, multisensority, as well as expressions of vocalisations of other species. However, in an actual nature experience, zoosemiotic modelling is semiotically vastly more complex and nuanced than the possibilities of linguistic modelling allow for. There appears to be a qualitative gap between zoosemiotic modelling and linguistic modelling. In nature essays, it is rather the layer of artistic modelling that can effectively relate the text to environmental experience through different poetic means of expressions, combinations of codes and languages. Multilingual nature of an artistic text, as described by Juri Lotman (1967), makes it possible for nature essays to reflect diverse and often contradictory nature experiences and makes it understandable to readers in various contexts. Focusing on zoosemiotic modelling thus brings about the necessity of reconsidering the relationship between nature experience and nature essay as between two semiotically complex wholes. Rather than adequately representing nature experience, a nature essay can direct its reader to the immediate contact with nature and foster the processes of modelling

nature. It is this contact within which the reader can develop his or her own zoosemiotic, multimodal and environmentally rooted environmental experiences.

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"320 MILLION YEARS, A CENTURY, A QUARTER OF A MILE, A COUPLE OF PACES": FRAMING THE 'GOOD STEP' IN TIM ROBINSON'S *STONES OF ARAN*

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Tim Robinson's *Stones of Aran* diptych is an extraordinary piece of place-based writing. It takes as its subject Árainn, the largest of the Aran Islands, which lie off the West coast of Ireland, and attempts what the cultural geographer John Wylie has described as "the total description of landscape". At the heart of the work is the motif of the 'good step' - a term Robinson uses to explore the relationship between humanity and the world, both through delineating the embodied acts of walking and observing, and by excavating complex states of consciousness.

Of particular significance in the context of this conference is Robinson's insistence on the frames he uses to discuss that step. In a bold move that takes us beyond debates over the relative merits of 'place' and 'space,' Robinson asks us to consider his work in the context of *Space*. In the Preface to his 1996 collection *Setting Foot on the Shores of Connemara* he states: "'Landscape' has during the past decade become a key term in several disciplines; but I would prefer this body of work to be read in the light of 'Space.'" He goes on to define what he means by 'Space': "ultimately there is no space but Space, […], for it is, among everything else, the interlocking of all our mental and physical trajectories, good or ill, through all the subspaces of experiences up to the cosmic." In the light of this declaration, the importance of the extraordinary process of imaginative orientation Robinson asks

us to accomplish at the opening of the first volume of the diptych becomes clear. He begins the book: "Cosmologists now say that Time began ten or fifteen thousand million years ago, and that the horizon of the visible universe is therefore the same number of light-years distant from us," and he asks us to hold these dimensions in our minds as "the context, the ultimate context, of other spans of time and space mentioned throughout this book (320 million years, a century, a quarter of a mile, a couple of paces, are measures that recur, I note, on thumbing through my manuscript)," before finally directing us to the more immediate subject of the books; "the coincidence of a period of my life with a spell of Aran's existence".

Timothy Clark, in a video plenary for the 2011 Emergent Critical Environments conference entitled 'Derangements of Scale', identifies our difficulty in apprehending and moving between the vastly differing scales of distance and time implicated in the current environmental crisis as a key factor in our apparent inability to address the problems facing us. This paper explores the implications for ecocriticism of Robinson's expanded sense of dwelling, questioning whether his interlocking spatial scales, which move from the local to the cosmic, provide us with the means to 'think big' in ways advocated by ecocritics such as Timothy Morton and Ursula Heise.

THE INSCRIPTION OF THE AMERICAN SOUTHWEST IN NAVAJO TRIBAL PARKS

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This paper aims at pointing out and analyzing the different uses and transformations of the landscape of Navajo tribal parks through the films of John Ford and the Native American literature of the Southwest of the United States. These parks, especially Monument Valley, located between Arizona and Utah, stand as a sign of power and victory for the Western immigrants and explorers and as a site of resistance for the indigenous inhabitants. These inhabitants were once displaced and dispossessed of their lands, during the advance of the frontier towards the Pacific Ocean, thus, creating the fictitious idea of an uninhabited wilderness.

Joni Adamson states in *American Indian Literature, Environmental Justice and Ecocriticism* (2001) that, while tourists and hikers approach national parks with a recreational purpose, Native Americans revere them and adopt an entirely different attitude when visiting them. The poetry of Simon Ortiz serves as an example of these divergent ideas about enjoying contact with nature. Ortiz, in contrast with other visitors, may reflect, for example, on the importance and symbolism of juniper trees within the Southwestern landscape and life in general.

The semiotics of the landscape of Navajo tribal parks has undergone drastic transformations depending on the activity that has historically been taking place within their mountains. The representation of Monument Valley in films and the coal mines under exploitation in

Coal Mine Canyon offer a new meaning to the recovery of the control of tribal land by the indigenous inhabitants. The emblematic site where John Wayne fought his battles against the Navajos and where the film industry once provided jobs for tribal peoples has become a wilderness almost deprived of their original inhabitants, both nature and animals, including humans. As to the coal mines, the Navajo Nation has recently been considering the purchase of at least one of them to take control of its production despite the opposition of environmental groups to find alternatives in renewal energies.

AERIAL ECOCRITICISM

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Any quest for aesthetic completion implies erasing arbitrariness and making poetry capable of investing literature with the full account of the environment a pre-linguistic sensual deep breath and onomatopoeias intend to give. Poetry makes written words breathe, for poems share with breathing and onomatopoeias the common goal of attaining perfect knowledge of the relationships binding Nature. Even if devoid of scientific sanction, the idea so well studied by Genette in his monumental *Mimologics*, that words are not arbitrary and have a natural reason to be, is appealing to aerial ecocriticism, for arbitrariness disappears in poetry, and words in a poem always have a historical and a poetical reason to be "naturally" the way they are. In poetry behind Hermogenes´ conventionalism there is always Cratylus´ naturalism.

Aerial ecocriticism recognizes the primeval drive to perceive beauty, that is, regularities in time and space, at the bottom of the never ending adventure of knowledge and of the most evolved cultural developments. The voyage back and forth from literacy to orality becomes a vivid metaphor for the task of both, poetry writing and critical practice. Perception of beauty and the will to know are so deeply interconnected that aerial ecocriticism acknowledges formal elaboration and contextual teleologies as complementary forces leading to aesthetic accomplishment. It was no frivolity that Plato in his *Hipias Major* linked the idea of Beauty to the idea of Good, and also to the idea of Will. If poetry pursues Beauty, its critical reading should take into ac-

count not only styles, figures, and generic structures, but also moral, ideological, political, and sentimental factors, all of them difficult to measure but without any doubt bearers of aesthetic significance.

Aerial ecocriticism is well aware of this. The linguistic condition of poetry is still the main focus of interest, but now conventions contribute to improve the capacity of poetry to achieving the pre-linguistic and non-arbitrary environmental attachment of oral cultures. The context around the poem becomes internal, aesthetically relevant, and the text ceases to be a solipsistic object. The contemporary worries of the ecological crisis affect the special attention paid to literary tradition and forms by the Russian Formalism and the structuralist agendas. Jakobson´s poetic function is still relevant, but the formal estrangement of objects turned into written words not only extends in time the aesthetic experience of a poem, as Shklovski pointed out, but it also improves the perception of objects as objects in their historical context.

The Kantian aesthetic judgment that considers the aesthetic object having internal purposiveness will not be enough to appreciate the aesthetic potential of a literary text or a work of art that breathes. Conventions and rhetorical proceedings connect poetry with life, aesthetics with ethics, beauty with knowledge, culture with nature. Circumstances are relevant, and the Anthropocene Era speaks for itself as a powerful context supporting aerial ecocriticism perspectives on words that breathe written by selected authors, namely Wordsworth, Unamuno, and Azorín.

RISK AND CULTURAL FRAMING IN CONTEMPORARY AMERICAN CLIMATE CHANGE FICTION

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What frames of reference do contemporary American novels draw on to respond to the risk of global climate change? Which role do the (often contested) cultural narratives and concepts that have expressed U.S. national identity for centuries play in the fictional exploration of this risk? Does the engagement with these narratives and concepts in the attempt to address the multiple threats of climate change prompt the employment of specific genre traditions and modes of representation?

Based on a definition of the contemporary American climate change novel as "risk narrative," i.e. as a narrative that focuses on the thematization of the anticipation of catastrophe and on the controversial character of – in this case the global climate change – risk, my paper will address these questions and thereby study the cultural work this type of novel performs. Among the cultural narratives and concepts recognized as relevant cultural frames are the following: the narrative of the United States as "nature's nation", the "frontier narrative," the concept of American individualism, and the concept of American exceptionalism. Among the novels studied will be: Barbara Kingsolver's *Flight Behavior*, Kim Stanley Robinson's Science in the Capital Trilogy (*Forty Signs of Rain*, *Fifty Degrees Below*, *Sixty Days and Counting*), Michael Crichton's *State of Fear*, and Susan Gaines's *Carbon Dreams*.

Earlier work on the topic: Criticism on climate change fiction in general has only been emerging over the last few years (for the Anglo-

phone literary production see especially pioneering studies by Adam Trexler and Adeline Johns-Putra); the critical focus on risk narratives is also only emerging (here the pioneering work has been done by Ursula K. Heise). The study of risk fiction (literary and visual) has been a research focus in the department of American Studies at the University of Bayreuth for the last two years.

CLIMATE CHANGE FICTION AND THE RE-TELLING OF ENVIRONMENTAL TIME

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One of the crucial challenges of the climate change crisis is bridging the wide gap between our present short-term thinking and the resulting long-term environmental consequences. How can what social psychologists call "future discounting," that is, the wide knowledge gap between the familiar preoccupations of everyday life and the abstract future of a climatically changed world be overcome (Giddens 2)? As the focus on the present and short-term becomes predominant, environmental time is annihilated. As Barbara Adam explains, environmental time encompasses those taken-for-granted processes and transformations of nature, which are often invisible to the human eye and remain unnoticed especially since the majority of people today live secluded from 'nature' in urban spaces (Adam 55).

In this paper I attempt to show how novels offer the resources to dramatize and to negotiate between the short and the long term, creating the narrative relationships between present and future, between human and environment while exposing the potential dangers that a bifurcation of time otherwise harbors. Particularly in the case of climate change, which is so difficult to be perceived because of its latency, a more profound engagement with time may open up new perspectives on environmental temporalities, thereby bridging the historical disconnect. A close analysis of the representations of time and temporal narrative techniques in climate change fiction thus can serve to

illustrate the telling of environmental time and reveals the structures of "slow violence" (Nixon) lying underneath the climate change crisis.

Turning to T.C. Boyle's climate change fiction *A Friend of the Earth* shows how the novel warns of a temporal divide and, at the same time, aims to bridge the historical disconnect by offering a narrative framework which allows the reader to re-connect past, present and future. Boyle thereby unmasks the veil of deception caused by shifting baselines, and urges the reader to see the dramatic changes and environmental transformations that occurred between fictional past and fictional future. Furthermore, since Boyle draws the reader into the narrative framework, she/he is left with no doubt of being part of the story and not just a distant observer. The novel, thereby, reminds the reader of the intergenerational contract and critically questions what kind of a world she/he wants to leave behind.

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LITERARY MINDSCAPES AND *POEEDIRAHU* (*POET'S PEACE*)

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Andrus Kasemaa (born in 1984), a young Estonian writer, has, by using subtle hints and by stressing out significant objects, gradually created a poetic world called Poeedirahu (Poet's Peace). It is a place that is referred to by a fictional toponym, but it has a recognisable geographical source in the author's home environment. Nevertheless, first of all it depicts a fictional or mental space which oscillates on the enchanting border between reality and fiction, since Poeedirahu does not exist outside of Kasemaa's fiction. Even though it is not difficult to identify the prototype landscape by looking at the map of Estonia, it is still a mindscape which becomes a whole through fictional works – the Poeedirahu the readers see is what the author wants the readers to see at a given moment.

In my presentation I will define and study this mindscape or literary *Umwelt*, which is a subjective and a poetic world: this Poeedirahu which has gradually grown and become visible thanks to Kasemaa's poetic texts.

The term "mindscape" is derived from the biosemiotic concept of *Umwelt*, but in the context of literary studies it becomes more metaphoric and is inevitably linked to interpretations arising from the field of cultural geography. Mindscape unites real and fictional geography, autobiography and fiction, by covering both the landscapes formed by the text as well as real landscapes from the author's home environment, which have been used as prototypes. It also covers the author's geographical perception, a deliberate selection of objects from the en-

vironment, his imagination; and the transformation of all of this into Kasemaa's fictional works through significant elements that define the surrounding environment of the first person narrator. This kind of a mindscape is a literary mental counterpart to real landscapes or even an alternative world based on them.

Poeedirahu's descriptions, which form the mindscape from the space which surrounds the subject/author, occasionally become covered by a veil of fiction and playfulness which prevents the reduction of the fictional space into mere actual geographic landscape. The author makes a subjective choice from among objects, phenomena, and landscape forms which he senses or consciously perceives in the surrounding landscape and which he presents to the reader. This makes one ask, how has Kasemaa's poetic place-creation taken place? What is his subjective world like? How similar are the geographical perceptions of the author's and his narrative self? What are the significant objects from which a textual mindscape is formed from and how does this mindscape, Poeedirahu, become visible to the readers? Furthermore, does Poeedirahu correlate with any other mindscapes in Estonian literature, and if so, what are the interrelationships between different works of literature? How firm and permanent can a literary *Umwelt* actually be?

Poeedirahu, a fictional world which has been purposely formed by using the writer's senses, his will and endeavours, is a phenomenon for which using the biosemiotic model of Umwelt is useful as a literary research tool, since it simultaneously provides opportunities for interpreting the author's personal mythology and the fictional self.

THE PLACE OF ECOCRITICISM IN THE LITERARY UNIFIED THEORETICAL FIELD

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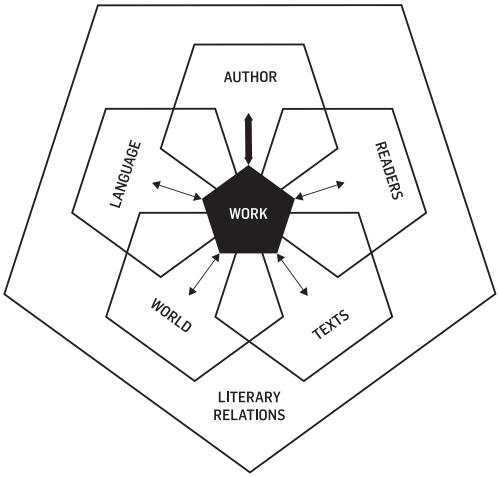
Contemporary literary criticism in our postmodern era is shaped by and co-determines an unprecedented openness to multiple differences. There are theoretical clusters that focus (1) on the form and structure of a work, combined with (2) linguistic and stylistic, (3) author-centered or (4) reader-centered approaches, (5) socio-semantic and historical, i.e. content-driven interpretations, (6) intertextual relations, and (7) complex combinations of these.

As a result, literary research is subject to an overwhelmingly rich multitude of different theories, methods, points of view or paradigms: literary historical, comparative, bio-bibliographical and reception studies, poetic, linguistic, textological, close reading, structuralist, semiotic, narratological, intertextual, translation-theoretical, psychoanalytical, cognitivistic, socio-psychological – including gender and memory studies, postcolonialism, new historicism –, as well as intercultural studies, post-structuralist discursive, hermeneutical-phenomenological, mytho-theoretical, analytical philosophical, formal statistical, digital and other productive approaches. Such versatility is necessary as different authors, texts, phenomena, traditions or levels can actualize separate networks and methodologies. Thus, the study of literatures in general is conducted within and indeed points beyond a comprehensive unified meta-multi-theoretical field that tries to integrate a multitude of polylogical choices central to the humanities today.



Of increasingly central importance among the multiple approaches are ecocritical perspectives. The paper will situate ecocriticism in the mindscape of contemporary literary theories with respect to its identity, definition, interdisciplinary relations and future possibilities. The question of literary-specificness will be posed in terms of the hermeneutic (structural) circle: do poetic elements align with their context like natural elements behave in their environment. In other words: can ecocriticism – which apparently exclusively operates on the level of mimesis – also function on the level of poiesis?

FRAMING HUMANITY BY FRAMING NATURE: JOHN MAXWELL COETZEE'S DISGRACE IN THE CONTEXT OF KANT'S THEORY OF MORALITY

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Immanuel Kant wrote in his 1797 work, *The Metaphysics of Morals*, "he who is cruel to animals becomes hard also in his dealings with other men," whereas those who refrain from inflicting unnecessary pain on other living creatures improve in themselves the propensity to treat other people well. Since he also argued that people, as human and moral beings, have a duty to strive for other men's well-being and happiness, it could be argued that the way in which men treat animals testifies to their humanity and morality. Conversely, men who maltreat animals and indulge in wanton destruction of nature violate the basic human obligation, that is, the duty to moral perfection, and, hence, weaken their humanity. In a sense, then, according to Kant, nature frames the meaning of humanity that men should emulate.

Over one and a half centuries after Kant, a South African novelist, John Maxwell Coetzee, published a novel entitled *Disgrace* (1999) in which he portrayed an individual called David Lurie who during his struggle to rediscover what humanity is engages in killing unwanted dogs and personally bringing them to the incinerator where he takes care to cremate them with decency and respect. Although his concern for, apparently, such a trivial thing can appear senseless, seen from the perspective of the Kantian philosophy, this care to respect dog corpses marks the beginning of the renewal of his humanity. In a way,

then, it is nature (in this particular example, dogs and their corpses) that frames Lurie's humanity. It makes him rediscover it for himself.

The aim of the paper is to demonstrate how Kant's ideas concerning the relation of humans to nature help to understand Lurie's decision to assist at the killing and incinerating of dogs as a gesture leading to the revival of his morality and, thus, humanity. The paper concludes that *Disgrace*, when approached with Kant's theory of morality, is a novel in which J. M. Coetzee expresses the (Kantian) idea that the way in which men frame nature, that is, the manner in which they relate to it, is very formative of the way in which they frame their own humanity.

THE GROTESQUE AND NATURE: INTERACTION BETWEEN NATURAL AND CULTURAL SIGNS

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The grotesque is an old phenomenon which connects nature and human fantasy, or natural and cultural signs; as such, the grotesque is a phenomenon which includes a playful interaction between natural and cultural signs. The grotesque is a tragic phenomenon, but also tries to be comic. This means that the grotesque connects laughter and tears: it is laughter through tears. The aim of the paper is to analyze how grotesque motifs and images have acted in different cultural periods, and how these grotesque images have represented nature.

The best motifs for creating or inspiring grotesque elements in literature and the arts are motifs of reproduction and fertility (e.g. how heroes are born in national epics and myths). Originally, these motifs expressed the positive meaning of rebirth and nature in folklore, but the meaning of fertility has changed into a negative in modern history. These motifs and symbols have changed in literature, but they appear in literary texts in different ways and in different contexts again and again, such as in the Estonian writer Enn Vetemaa's travesties *The Memoirs of Kalevpioeg* (1971) and *A Guide to the Estonian Water Sprites* (1980), or in postmodernist poetry.

The grotesque may appear in different ways, and it may have different cultural aims in different periods. The grotesque may be a style in a literary work or the grotesque may appear as a stylistic element or character or situation in a text. The grotesque indicates the

deformations of the real world, and the grotesque also creates a new world which has a deformed structure, including deformed nature, e.g. different fantastic beings, such as female giants or monsters with deformed bodies, and who live on faraway islands (e.g. *Odyssey*, Jonathan Swift's *Gulliver's Travels* (1726), Edgar Allan Poe's *The Narrative of Arthur Gordon Pym* (1838), Friedebert Tuglas's short story "At the End of the World" (1915) etc. In general, these islands have rich vegetation, and all the nature and plants are very important, because they express the feeling of fear.

Grotesque motifs and images which exist in literature and art provide a rather playful character, and represent the grotesque as a phenomenon of play, e.g. surrealist and postmodernist literature and art. The paper compares different works of literature and art.

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ECOCRITICISM AND THE EUDAIMONIC TURN: THE CASE OF JEAN GIONO

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How do ecocriticism and the environmental humanities more generally relate to emergent discourses centered on human happiness, well-being and what Aristotle called "eudaimonia"? On the one hand, environmentalists have often seemed to wallow in apocalyptic negativism, pushing for human abstinence, denial, restraint etc. and ignoring the need to articulate inspiring alternative human visions of "the good life." Representatives of "positive psychology" and related discourses, on the other hand, can sometimes seem blithely anthropocentric, arguing as though the question of human health and happiness could somehow be isolated from external environmental determinants.

One way to breach this schism and enable more positive articulations between "the green turn" and "the eudaimonic turn" is to focus on the life reform movement of the early twentieth century and the literature and culture that it inspired. In this presentation, I approach my topic through a discussion of the concept of "joy," referring specifically to the French writer Jean Giono's novel *Que ma joie demeure* (*The Joy of Man's Desiring*, 1934). *Joie* is one of Giono's most complex and ambitious novels, set (like most of his works) in the south of France and concerning what Giono called a "projet pour l'établissement de la joie" (a "project for the establishment of joy"). In the context of the Depression and World War II Giono was

often faulted for his lack of faith in centralized political movements and even accused of nurturing extreme right-wing sympathies. In my discussion, however, I demonstrate that Giono's writing shows quite a "rational" if not even "radical" recognition of human-natural interrelatedness.

FRAMING WILD ANIMALS: AN ECOSEMIOTIC VIEW ON ZOOLOGICAL GARDENS

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Zoological gardens are intriguing institutions – they mirror our cultural history, they manifest our perception of wildlife, they try to conserve what is left of endangered species: zoos merge culture with nature. In addition, these hybrid environments seem to be laden with controversies: zoological gardens have the purpose of educating people, yet the public visits zoos mainly for recreational aims (Mason 2010); animals living in zoos are highly managed by people due to their captivity, yet for species conservation to succeed, animals should be wild (both genetically and behaviorally) (Young 2003); conservation biologists should be blind to species, yet conservation programs mostly tend to focus on large charismatic mammals (Adams 2004). As a result, it is often the case that what people desire, what animals require and what zoological gardens are set to achieve are not in accordance with one another. It was already H. Hediger (1969) who set out to develop zoo biology, which has its aim in reconciling the demands of the people and requirements of the animals. However, these difficult issues are continually debated in contemporary research and literature on zoological gardens (e.g. Norton, Maple, Stevens 1995; Lee 2005; Zimmerman et al. 2007; Hosey, Melfi, Pankhurst 2009).

This presentation has the purpose of expanding upon aforementioned controversies by drawing mainly on attitudes that people have towards wildlife, towards certain species, and how these attitudes and

perceptions shape zoological gardens as hybrid environments. Expanding on zoo biology, it is fruitful to support this research area with the discipline of ecosemiotics, which allows for the incorporation of social and natural sciences – namely cultural and biological ecosemiotics (Nöth 1998). This approach enables us to clarify how people as biological beings perceive their immediate surroundings and how the cultural attitudes that people hold are mutually intertwined. As a result it can be argued that this amalgam directly influences the principles and practices of keeping wild animals in zoological gardens.

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FRAMING ENVIRONMENTAL POVERTY IN SOUTH ASIAN POETRY OF EXILE

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This paper aims at finding reasons for an environmental dystopian line undermining the poetry of authors from South Asian ascent living in Canada and the US, especially in their gaze for adequate terms of comparison between the inbred mother countries and the lands of adoption –that is, the need for fleeing from the third to the first world due to socio-political and economic factors. Authors such as Himani Bannerji, Cyril Dabydeen or Rienzi Crusz, among others, rewrite and judge their present milieus in relation to the deprived human-made conditions of tropical and plentiful environments, describing thus ambiguous feelings of topophilia/topophobia, as Chinese-American critic Yi Fu-Tuan would put it (Topophilia 1974; Space & Place 1977). Both contradictory paradigms intertwine the confessional literature written from the physical distance from the homeland making clearer the actual situation of abandonment and maltreatment of those natural "lost paradises", not only from the point of view of their local governments but also at a world scale, talking in macroeconomic terms of environmental justice (Buell, Writing for an Endangered World 2001; Slovic, What's Nature Worth 2004). This constant process of decoding and recoding values of space and territory in their poetic works provokes curious appropriations and distortions of landscape that are most of the times paradoxical and opposite; forming therefore potent binarisms such as the embellishment of toxic home places (Buell, "Toxic

Discourse" 1998) the appearance of positive feelings like love or philanthropy among ruinous spaces, or the use of natural metaphors to express racist and segregationist attitudes towards the émigrés. Furthermore, in the recreation of landscape of this literature of uprooting the Global South, an intimate relationship between humankind and the surrounding environment is established. Thus, nature is appropriated, distorted and used to reproduce feelings of displacement, hostility and immersion in the unknown territory, although the land could also be seen as a promised and chosen land. The lost homeland may be embellished and be depicted in a more subjective way, to the point of being considered as a "paradise regained" in the selective memory of exile. At the same time, travelling metaphors become a polyvalent and powerful synergy, which finds its correlate in the absence of mobility implied in the inhabitation of the "Other land." Thereby, both spaces tend to be compared, opposed and deconstructed, in a process of assimilation and integration that many times seems problematic and always provokes an ambivalent feeling of melancholy and nostalgia. Lastly, the natural environment looks primarily as a literary locus where, through recurrently descriptive examples, the social, cultural and communicational differences that appear in the mind of the migrants are recreated and exorcized. This revealing quest for assimilation and rooting becomes the goal of confessional works that thus avoid becoming obsessed with the past or, vice versa, living in a superficial today with no substance. Ultimately, it will be in this literary *conjunctio oppositorum*, in this alchemical quest for personal transformation, where the polymorphic, rich, valuable and multicultural literary identity finds its right place home and achieves its true spiritual materiality (Plumwood, Environmental Culture 2002).

HYBRID WATERS AND STORIED MATTER IN THE FISHERMAN OF HALICARNASSUS' MEDITERRANEAN TALES

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The Mediterranean Sea stands out as a prime example of being both a geographical site and a territory of imagination. It is considered a hybrid zone. In this paper, I will exemplify this hybrid zone with stories from the Turkish Mediterranean writer, the Fisherman of Halicarnassus, who wrote about the agentic voices of the Mediterranean. Manifesting in hybrid waters and storied matter, the liveliness of nonhuman entities in and around the Mediterranean figure prominently in the author's works, which focus on how the sea creatures exhibit an astonishing capacity to frame "nature" in meaningfully articulate ways.

The Fisherman takes as his concern the nature of hybridity and boundaries in creating storied matter. He foregrounds the agential kinships in the shared existence, urging us to listen to the immortal voices of the enduring Mediterranean bio-cultural formations on Turkey's shores. I will argue that these voices are essential in understanding our environmental connections, imagination, borders, and forms of hybridity.

EARLY CINEMA, ECOLOGY, AND THE PERMEABLE FRAME

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The frame in cinema works both to section off a portion of the visible world as well as to separate spectator from spectacle, but these boundaries are hardly fixed and are often more permeable than solid. The representation of nature and natural landscapes was a central subject matter for early cinema, and a proto-ecological imaginary with a porous frame can be teased out of the reception of these films from the period that provides productive avenues for considering the ecological dimensions of the medium now in our own day. This presentation will focus particularly on early Swedish film from the first actuality films to the full-length feature films of the silent era to consider how the cinematic frame was understood by early audiences to provide not only a visual access to the world, but also a reciprocal proto-ecological relationship to the things that were presented. Although many of these films engage the natural world in unique ways, this analysis is not primarily thematic rather the focus will be on the perceived relationship forged by these films between the human and the non-human.

The proto-ecological relationship audiences experienced with film, I argue, was an extension of the relationship that had existed between still photography and viewers already well established in the popular imagination by the turn of the century. Within the viewing dynamic that Tom Gunning calls the "cinema of attractions," cinema built upon photography's distinctive indexical relationship between spectator and spectacle and was able to foster an ecological imagination with weak

ontological boundaries across the frame separating observers, representations, and reality. More than with most other media and visual attractions, audiences saw themselves as inhabiting a shared space with what the films represented. My presumption is that by looking back to early cinema, it might help in conceiving the limits and possibilities for re-conceiving eco-cinema in the twenty-first century.

A DARK POPULAR GREEN: ECO-AESTHETICS IN POPULAR CULTURE

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As an alternative to the realist pretensions of mimesis, Timothy Morton proposes 'ambience' – the 'sense', created through the text, 'of a circumambient, or surrounding, *world* . . . something material and physical, though somewhat intangible, as if space itself had a material aspect' (Morton 2007: 33a). He argues, in turn, that the prevalence in contemporary texts of a dark posthuman ambience frames a posthuman sense of our intrinsically imperfect understanding of nonhuman nature; of simultaneous kinship-estrangement with the nonhuman; as well as a sharpening of such philosophical and practical anxieties, in the context of environmental crisis, into a 'dark ecology'. And, Morton suggests that dark ambience takes shape via a series of related aesthetic practices: *rendering* (the imposition of an atmosphere or 'world' onto a text which, in turn, constructs or simulates 'reality' (35)); the *medial* ('evoking the medium that utters them' (40)); *tone* (creating an atmosphere of place (43)); the *Aeolian*, 'disembodied sound emanating from an unseen source' (41).

In eschewing mimesis and by foregrounding a self-reflexive (*medial*) engagement, Morton's eco-aesthetic raises the possibility that technological media forms, while apparently signifying humanity's difference from 'nature', might actually articulate a posthuman ecological complexity. Consequently, I will argue – as Morton himself suggests – that dark ambience is already one of the prominent ways

in which popular cultural texts have been framing nature, a framing created through a correspondingly complex 'media ecology' of popular taste, commercial production, and folk/subcultural expression. While the analysis might encompass music (e.g. Joanna Newsome or Kate Bush), I will consider two key examples: entirely set in a dark, underground, abstract world, populated by only half-recognisable sentient beings, trees and flowers, the *PS3* game *The Undergarden* (2011) combines ecological understanding and responsibility with a dark unsettling sense of nature by which, it is implied, both in the ambience and architecture of the game, nature frames humanity; contrastingly, in the anime films of Hayao Miyazaki a similarly dark ambient poetics co-exists with the romantic sublime. Shaped by Miyazaki's close references to the Japanese environment, in particular forests, I will speculate that the tempering influence of the sublime in these texts (see Hitt 1999), offers, perhaps, a more accurate reflection of the polysemic affinity-estrangement to nature which permeates human culture, popular or otherwise.

DWELLING IN FICTION: LITERARY TEXT AS SECONDARY HABITAT

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Language and living, two preeminent semiotic activities, are intrinsically linked. In fact, through one, we elucidate the other. For the biosemiotican Jesper Hoffmeyer, language is a "common dwelling place [...] one large common *Umwelt*" (1996, 112). Indeed, as a "symbolic species" (Deacon, 1997), our biosphere is always also a semiosphere (Lotman, 1990), an environment of meaning, habits and codes.

What does it really mean to "dwell"? In "Building Dwelling Thinking," Martin Heidegger writes: "To dwell, to be set at peace, means to remain at peace within the free sphere that safeguards each thing in its nature. *The fundamental character of dwelling is this sparing and preserving*" (1951, 149). Our dwellings spare us from the harshness of the environment; they preserve us and allow us to conserve and to maintain our existences. Expanding on Leroi-Gourhan's (1993) analysis of tool use as externalization of organic functions, we can note how dwelling technologies mirror the homeostatic functions which stabilize our *milieu intérieur,* as defined by Claude Bernard (1878-1879): buildings define an exterior *milieu* where we are spared and preserved.

In *Incomplete Nature*, Terrence Deacon underlines the "absential" nature of the vital, where "longing, desire, passion, appetite, mourn-

ing, loss, aspiration – all are based on an analogous intrinsic incompleteness, an integral without-ness." (2011: 3). Dwelling and building are gestures made necessary by such without-ness: the absence of warmth forces us to build and to dwell within an artificial structure. In this way, technology emanates from our being organic. Language, as a symbolic technology, also follows this path (a view interestingly articulated in the work of Bernard Stiegler, 1998) and various uses of language are rooted in absence: this, most of us do hundreds of times a day, as we use words to evoke things that we cannot point to.

If language is a dwelling place, as Hoffmeyer suggests, from what threatening absence does it protect us? From what does it spare us and preserve us? What stable environment does it define? How can we inhabit such an environment? And what can be said about the specific practice of literature? From its very inception, literature has helped us negotiate the nature / culture divide, and can thus be rightly considered as technological. Can we consider literary practices as building techniques of our human semiosphere? Is it possible to dwell in texts? Can we roam a literary text as we do a landscape? Is there something in the practice of re-reading familiar fiction that can shed some light on these theoretical questions at the intersection of biology, ecology, philosophy and literary studies?

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CULTURE FRAMING NATURE: THE CASE OF PRAGUE ZOO ELEPHANT HOUSE

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In our paper we analyse the case of opening a new elephant house in the Prague Zoo in spring 2013. This event was covered by nearly all of Czech mass media. The elephant house is called the "Elephants Valley" and it brought thousands of visitors to the Zoo. The cost of the pavilion was enormous (more than half a billion CZK). It is the largest complex which has ever been built in Czech zoos. We analyse the opening ceremony and its coverage by the media (the press, Czech TV and Czech radio, Zoo webpages and the Zoo Facebook) as well as ideas connected with the presentation of the project.

The ceremonial opening had a rich cultural and musical program. The Czech element was represented by the folk band Ondráš and the folk-rock band Čechomor, and then there was the presentation of a Sri Lankan band Taxila Central College Cultural Troupea, and of a group of African drummers and dancers. Sri Lankan Minister for Economic Development, Basil Rajapaksa, was a special guest of the event, as Sri Lanka donated two elephants and will donate two more in the future. Part of the program was also the christening of an elephant baby. This special mixture of the program, which should represent the idea be-

hind the pavilion, as well as the building of the pavilion itself, is in the focus of our interest.

Why were Sri Lankan and African themes parts of the program? How is the culture of the countries where elephants as species come from connected to the Elephants Valley? Are the elephants in the house persons, when we know their personal stories, when they have names? How is the whole topic connected to the early 20th century trend of representing animals in the zoo by the culture of the land of origin? How does human culture frame nature in this very case of Prague elephants and their house? These questions are one of the sides of the problem we are interested in. The other half is how the media represented the event.

A MINOR FRAME? HOW ETHNIC MINORITIES 'FRAME' THE ENVIRONMENT THROUGH WRITING: THE U.S. SOUTHWEST, A CASE STUDY

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In a globalized world ruled by the neoliberal rationale, some ethnic minorities still have their own ways of understanding, and writing, the environment. These perspectives have often been influenced by the discrimination that has derived from geopolitical conflicts in general and the actions of transnational corporations in particular, aiming at exploiting the natural resources of the world at whatever (social and environmental) cost.

Activists such as Arundhati Roy, Ken Saro-Wiwa, and Nobel Prize recipient Wangari Maathai, among others, have given (written) voice to the concerns of repressed peoples and environments around the globe. Narration is a common method to frame the world and many writers have also used fiction as a way to approach these situations. Native American writer Linda Hogan and her novels *Mean Spirit* and *Solar Storms* could be used as examples of this kind of literature in North America, my area of study.

I intend to apply Rob Nixon's concept of 'slow violence', Ramachandra Guha and Joan Martínez-Alier's theory of 'environmentalism of the poor' and Vandana Shiva's term of 'maldevelopment' to the analysis of several examples of intersectional environmentalism expressed through narratives around the globe: some of these examples will be drawn from Rob Nixon's book *Slow Violence and the Environmentalism of the Poor*,

some others will be particular cases compiled for this analysis.

Patterns will be drawn in terms of the shared characteristics of both the affected populations and the altered sites/environments, and the geopolitics behind resource extraction and the nation-states' attitudes towards these situations and their consequences. These commonalities will then be compared to the environmental struggle(s) carried out by some of the local inhabitants of the U.S. Southwest, the Chicanos. This will allow, not only to perceive the struggle of the Chicanos in a global perspective, but also to pinpoint the specificities of their particular situation, as well as the role of literature as a method to combat both cultural and environmental degradation.

Chicanos form a mix-blood community with Native American, Spanish, Mexican and Anglo roots, and are a growing 'ethnic' minority in the United States. Moreover, Chicanos' discourse offers an alternative standpoint of a popularly represented landscape, that of the area misleadingly identified as the 'Wild West'. Through the analysis of some literary works and their (potential) activist nature, the way in which Chicanos frame the environment they inhabit at the same time that they challenge the existing popular conceptions about it, will present yet another perspective of how a threatened cultural/ethnic group faces environmental degradation through narrative.

This study will not only delve into the complexities of Chicanos' cultural and environmental struggles, but also address questions such as: how does an ethnic minority fight environmental degradation from within one of the most powerful nations through narrative? And also, how do these narratives integrate the specificities of the socio-environmental struggle, at the same time that they overcome them, therefore fitting a global pattern?

BETWEEN RESOURCE AND "HEIMAT": GERMAN NOTION OF BALTIC NATURE

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The spread of deeper knowledge about nature, its possible resources and their rational use was a central aspect and object of Enlightenment literature. In the Baltic provinces of Russia, the Enlightenment was clearly dominated by new immigrants from Germany, who arrived after the Nordic War and for a few decades between the end of the 18th and the beginning of the 19th century turned the peripheral Western borderland of Russia into a vibrant, model Region of modern European thought. Their notion of nature, however, sometimes clashed with the notion of those Germans who had already been living in Estonia and Livonia for generations.

In writing about Baltic nature, different generations of German migrants spread local and new knowledge about the local environment (Baltic bogs and wild berries etc.) and its possible use for the German upper classes. In doing so, they started to construct a new sense of Baltic German "Heimat" (homeland) that later became a key argument in romantic literature.

In my paper I want to analyze the ways of framing local Baltic nature that we can find in Baltic German literature in its broader sense – in natural histories, topographies, journals, sermons, economic literature, in poetry, and books for children and the youth. As the first

step I want to discuss the importance of migration in Baltic German Enlightenment literature and its constructions of nature. As a second step I will contrast the economic approach (nature as resource) with the romantic approach of identity building in the course of constructing a new Baltic German "Heimat" between 1750 and 1850. As a third step I want to explain how both concepts functioned together in creating a new emotional *and* practical-economic concept of Baltic nature that – to a certain extent – mirrors the process of German migrants becoming Baltic Germans.

How did identity building in Baltic German migrant and colonial culture worked together with new ways of framing local nature? How was the imagined topography of a new Baltic German "Heimat" constructed? How inclusive/exclusive was this "Heimat" and what was the place of Baltic Germans and Estonians/Latvians/Russians within it? In doing so, I want combine the new theoretical approaches toward the construction of German "Heimat" (Blicke 2004) and "imagined topographies" (Highfield 2012) with aspects of Baltic German construction of identity (Plath 2011).

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THE SEMIOSPHERE AS NARRATIVE FRAME

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This paper intersects biosemiotics and narrative theory in order to redefine a highly problematic term in narratology – focalization. A term first coined by Gerard Genette to explain the perspectives contained in a narrative, whether focalization exists, how it is structured, and to what effect it can be analyzed continue to be challenged and debated. Yet despite the inconsistencies in our understanding of focalization, it remains a tool for narrative analysis. I address the main currents in the debate over focalization articulated by James Phelan, Susan Lanser, and others, but propose a different way of framing the analysis: Using Juri Lotman's definition of the semiosphere, I argue that when we talk about focalization we are actually identifying the construction of the semiosphere in a narrative text. In other words, when a narrative establishes the parameters of a semiosphere of interconnected Umwelten, it creates conditions for subjectivity in narrative discourse that we currently call focalization. Inversely, focalization is another way of identifying how a text illustrates the semiosphere that contains its narrative subjects.

But is semiosphere then an unnecessarily complicated way of describing point-of-view? This is a criticism made against focalization, as well; in the final analysis, it does not exist, or is no different from point-of-view. The concept of the semiosphere resolves this confusion between focalization and point-of-view, because the semiosphere created in a narrative enables the sense of a subject without relying on the domain of subjective experience. In other words, identifying the

semiotics of the narrative text that construct a semiosphere reveals how narrative escapes some of the limits of point-of-view. The semiosphere establishes, rather, the conditions for subjective experience, which precede point-of-view, and can even stand in contradistinction to it. I take as my point of analysis two well-known texts: The first is Aldo Leopold's renowned essay, "Thinking Like a Mountain," which is part of the environmental canon, and the second is Daniel Defoe's Robinson Crusoe, which often figures in discussions about focalization. In both I show how the text presents a semiosphere that informs our understanding of narrative.

TALES OF EFFICIENCY: CONNECTING NATURAL RESOURCE INDUSTRIES IN GREENLAND IN THE 1900S

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Today, Greenland's oil reserves, natural gas deposits or shipping lanes along its coasts are often central to the frequently invoked 'scramble for the Arctic'. Narratives revolving around resource scarcity and "seizing opportunities" surface in discussions on future economic development in the Arctic. The Greenlanders' political sovereignty, economic interests of various actors and not least the integrity of the land's nature are at stake. Especially when it comes to developing new resource stocks, be it soil minerals, oil reserves or reclaiming cultivable land, stakeholders adhere to at times contrary stories about what should be done – and why. For Greenland, however, this situation is not a new one. In the early 1900s, private business initiatives claimed that natural resource exploitation was neither effective nor that it supported sustainable development of Greenlandic society. The land's natural resources, mainly seals, fish and soil minerals, were not only crucial for the survival of its native inhabitants but also of vivid interest for the colonial administration and private stakeholders. At the turn of the last century, Greenland was in practice ruled by the Danish state's royal trade department that enjoyed a monopoly on resource exploitation and trade. In the early years of the 20th century, colonial policy was fundamentally challenged by an ever more popular view that favored free-market conditions. Private initiatives, led by a handful of influential figures with an extensive network of

economic ventures, set out to tackle inefficient resource use. These business and financial stakeholders argued for breaking the state's monopoly. Their allegation of 'letting riches lying waste' was a powerful narrative that praised seizing the unprecedented opportunity to modernize Greenland's economy on the basis of fishing, whaling and mining. Investments and personal engagement of its leaders placed the Danish Landmandsbanken and the East Asiatic Company (EAC) at the heart of a network that linked industries and ambitions on a global scale. I analyze how far-reaching connections of Denmark's private sector sought to integrate Greenland in a global web of resource exploitation and trade around 1900. This paper presents first results of archival research for my PhD project. I aim at illustrating complex stakeholder interrelations that led to increased interest in Greenland's natural resources. While having entangled commercial interests, these actors took up a central role in criticizing the traditional colonial regime in Greenland. In recent historiography, the growing support for privatization at that time is generally ascribed to the private sector's strengthened patriotic mission and shifting power relations in Denmark's domestic politics in the early 20th century. I suggest, however, that rather than discovering liberal ideals, the key stakeholders in privatizing resource exploitation responded to changing economic conditions in distant environments – connected to Greenland by financial and personal ties.

OCTOPUS: THE PHILOSOPHER

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Framing and contextualizing animals and ecological relations is necessary, inevitable, but yet problematic. The reason being, that any activity of "framing" implicitly includes some sort of an understanding of the particularity of the framer as an agent, and consequently the framer's particular frame of reference. As such, any and every framing is already framed, whether explicitly or implicitly, by way of our expectations about the one who is doing the framing. The question then is not: how do we frame things, but rather: who does the framing?

The answer is as clear as it is unfortunate: despite our understanding of and respect for cultural differences, various viewpoints, methodological approaches, discursive constructions, and methodical principles, it is nevertheless presumed – both inevitably and problematically – that it is the human being, Man capitalized (with all the consequences thereof), who has agency in this activity of framing; it is he is the one who provides the contextualization.

This, however, should perhaps be seen as an avenue for hope: once we acknowledge this, we are perhaps in a position, tentative as it may be, of retooling the issue of contextualizing nature as a non-human issue – so that we may perhaps shift agency around, and thus refrain from focussing on the human gaze alone.

For this purpose, quasi-philosophically yet fully-literarily, the presentation will narrate a few philosophical stories about nonhu-

mans as the ones who, in an admittedly fable-like manner, turn their own gaze towards humans. The question will be: how would nature frame the philosopher, rather than how a philosopher would frame nature. As such, these stories will not be philosophical fables about animals, but rather an octopus's fables about philosophers.

'THE PAGE IS PRINTED': ANIMAL SIGNS AND PERCEPTIONS IN THE POETRY OF TED HUGHES

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This paper explores the notion of signs and traces within the work of the British poet and environmentalist Ted Hughes (1930-1998). Using his well-known 1957 poem 'The Thought-Fox' as its point of departure, I argue that Hughes uses images such as footprints, fossils and echoes of animal sounds to enrich his poetry and visual art. I then move towards a discussion of the ways in which Hughes' poetry represents animal perception.

The poem 'The Thought-Fox' ends with the line 'The page is printed', suggesting that the act of artistic creation is analogous to leaving a trace, a trail that others can follow. The idea of tracking creatures, whether in hunting or poetry, is examined in the light of Hughes' essay and radio broadcast 'Capturing Animals'. These writings are used to provide insights into how Hughes frames animals, their tracks and their signs in poetry.

Hughes can also be said to 'frame' nature, and use nature to create frames, in his visual art. I examine limited edition illustrated broadside prints of poems that Hughes made with the Morrigu Press. Images of the traces of the passage of animals - otter footprints, the protective cases of caddis fly larvae - frame poems by Hughes such as 'Visitation' and 'Caddis'. Elsewhere in his poetry, Hughes uses disconcerting signs of human interference in animal lives – the otter pelt in 'An Otter', the fossilized Irish Elk – to raise awareness of wider issues such as hunting and extinction.

Hughes is renowned for his poems about animals, from powerful predators to vulnerable species at risk of extinction. While 'The Thought-Fox' largely discusses the poet's perception of a fox, some poems – 'Macaw and Little Miss', 'October Salmon', 'The Jaguar', 'Second Glance at a Jaguar' – attempt to represent the way these animals perceive their world. The jaguar is an important symbol in his work, as the panther is for Rilke and Sylvia Plath. In addition to his well-known poems about jaguars, Hughes also created two sculptures of jaguars. This paper considers how Hughes frames animal perception in his poetry, focusing on his description of what might run through the mind of a caged jaguar. The idea that animals have their own perception of their environment – their *Umwelt* – is one that resonates with the work of Jakob von Uexküll. Hughes' poem 'The Jaguar' is considered in relation to Rilke's poem 'The Panther' as an imaginative foray into animal perception. Both Uexküll and Hughes knew Rilke's poem; I use Geoffrey Winthrop-Young's discussion of Rilke and Uexküll to illuminate Hughes' descriptions of captive jaguars' perceptions of their environments. His poetry about caged animals' perceptions brings in Hughes' wider concerns about domestication and animal rights.

This paper draws on Derrida's discussion of traces in 'The Animal I Therefore Am (More to Follow)' to interpret ideas of signs and tracks, and Uexküll's *A Foray into the Worlds of Animals and Humans*, to open up new ecocritical angles on Hughes' work.

TEXTUALISING NATURE IN URBAN PLANNING OF TARTU CITY CENTRE

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'Text' has been a frequent notion for analytical conceptualisation of landscape and city. In general, one can find the concept in analyses of textual representations, or suggesting a metaphor of "reading" an (urban) landscape (e.g. Duncan 1990; Widgren 2004; or 'legibility' in Lynch 1960). In contrast, the idea of the 'text of St. Petersburg', as used in the Tartu-Moscow School of semiotics (Mints, Bezrodnyi, Danilevskij 1984; Toporov 1984), has also been applied for analysing particular cities as organising topics in literature and in culture more widely, yet not equally in studies of actual urban spaces. The understanding of 'text' as a semiotic system and mechanism in the Tartu-Moscow School (Lotman et al. 2013) is, however, more promising than what the idea of the 'text of St. Petersburg' reveals.

My project in this paper is to uncover an analytical framework by focusing on the concepts of 'text', 'textualisation' and 'texting' for studying the planning of urban environment (for example, also as 're-semiotisation' in Iedema 2001). The paper deals with the case of urban planning process for Tartu city centre (in progress in 2013) and is particularly concerned with the frames and roles that urban-nature landscapes, such as parks and the river Emajõgi, have put in during this "textualisation" of the local environment, societal ideals and practices.

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VIDEODROME, CDNA, AND THE PLACE OF MUTANTS IN THE ARCHIVES

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This lecture discusses the centrality of archive through enframing technological-fictional discourse in David Cronenberg's *Videodrome* (1983) and the implications of the U.S Supreme Court's decision regarding whether genes may be patented in *Association for Molecular Pathology et al. vs. Myriad Genetics Inc.*

In Cronenberg's film, a TV station owner named Max Renn, in search of new material for Channel 83, stumbles upon a pirated video featuring torture and murder whose malicious signal creates brain tumours and corporeal hallucinations. This signal is utilised as a means of purifying those deemed depraved enough to watch its illicit content; as a project, Videodrome is the face of a 'socio-political' battle 'to control the minds of North America'. In the argument of Myriad Genetics, winning the patent case would have granted the exclusive right to isolate two genes whose mutations cause breast and ovarian cancer as well as the right to create synthetic composite DNA (cDNA) of those genes. The U.S. Supreme Court ruled DNA found in the human body cannot be patented because such rudimental 'laws of nature' cannot be patented, but synthetic cDNA is patent eligible as an inventive creation not found in nature. Both science fiction film and science creation borrowing from narrative fictions dislodge previously arranged categories of nature/culture, objective/subjective, invention/convention, etc.

The common feature of both *Videodrome* and the court case is that of an archive whether in the form of VHS tapes or Myriad's incredible data store of human genomic information. This lecture shall explore through Jacques Derrida's *Archive Fever* approaches to dismantle objects for their proper or 'natural' human knowledge against the force of fictional and actual archival machines. However, such a discussion is deserted without recourse to aesthetic values or themes questioning the status of material available to archive. It is along aesthetic figurations that archival work confuses the natural/cultural frameworks. In Cronenberg's film, it is the snuff film named Videodrome which mutates the human form in confusedly real hallucinations. In the Myriad case composite DNA, which carries the same information as genetic DNA but with its introns manually trimmed, legally carries the status a non-natural but very real creation. I will explore the ideas of cross-contamination between science [laboratory]-[film] fiction as discourses influencing the other's archival logic to economise or save. With mindfulness towards avoiding perfect analogues or models between disciplines, I will use the trope of mutation – with its implications in disrupting perfect organic theories and singular bodies in knowledge or nature – to rethink the knowledge and aesthetic boundary. At what point is something a mutant against being accepted by the order of archive or what is permissible mutation to purged? The heart of this paper's findings hopes to thus speculate on the consignation of mutations to its own kind of technology in contrast to the technology and economising of what is proper or natural to archives.

PAINTED RICE CAKES IN COMIC FRAMES: BURKEAN PERSPECTIVES ON SNYDER'S ECOLOGICAL EPIC

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"Burkean" in this title refers to Kenneth Burke, the esteemed American critic whose career spanned the bulk of the twentieth century from *The Wasteland* to global warming. Burke is noteworthy for having likely been the first to employ the term "ecology" in a work of literary-cultural criticism (in *Attitudes Toward History*, 1937). His work's pertinence to ecocriticism has been acknowledged since "ecocriticism" as a term was coined (in 1978 by William Rueckert, a preeminent Burke scholar, in "Literature and Ecology: an Experiment in Ecocriticism," in which essay Burke is referred to as "one of our first critical ecologists") and has been elaborated since by Rueckert himself, Lawrence Coupe, Robert Wess, and myself, among others. Burke's thought pertains all the more to this conference's theme of "framing nature" in that a terminology of frames figures centrally in his considerations of the environmental valence of literary works. Especially pertinent is what Burke calls a "comic frame of acceptance." To Burke comedy evinces a healthy, realistic sense of human limitation, seeking to account for and accept the totality of our earthly state. It maintains an ecology of sorts because it balances between extremes in attitudes toward prevailing ideological dispensations: on one hand, credulous and sentimental allegiance to reigning symbols of authority; on the other what Burke calls debunking, cynical and corrosive, the exposure of unclothed emperors and men behind curtains. Burke's "comic

frame of acceptance" accepts not the order that is; rather it accepts the inevitability for *some* such dispensation, some "terms for order," while acknowledging that dynamism in situations must render such terms progressively less effective, responsive, conducive to social amity, respectful of natural systems – in sum, less adaptive. The comic frame is corrective in that it seeks strategically to adjust attitudes toward order without lapsing into the fanaticism and conflict, the incipient war of all against all, implicit in extreme postures of debunking, what he calls "frames of rejection." One purpose of this presentation is to put Burke's notions again into play in a venue concerned with environmentally-inflected strategies of framing. The other purpose is to adapt Burke's terms to work by Gary Snyder, among the foremost poets and polemicists of ecological sensibility writing in English since the second world war. His ecological epic *Mountains and Rivers Without End* (1995) is a book-length work assembled over the course of four decades, a collection of discrete poems which Snyder presents and has regarded all along as a single long poem. Burke's terms suggest perspectives on several ways in which *M&RWE* can be seen as strategically couched in a comic frame and as itself concerned with strategies of framing: framing by genre identity, by spatial and temporal association, and by embrace of traditional nature-based mythologies comingled with reflection on their constructed nature – as with the painted rice cakes of the poem's epigraph, which far from failing to satisfy, are alone capable of fulfilling our creaturely needs.

SEEING NATURE THROUGH A RACIAL FRAME: THREATS, CONNECTIONS, AND THE VIBRANCY OF ECOLOGICAL "MATTER"

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In *Demonic Grounds: Black Women and the Cartographies of Struggle*, Katherine McKittrick argues, "black matters are spatial matters. And while we produce, know and negotiate space – albeit on different terms – geographies of the diaspora are accentuated by racist paradigms of the past and their ongoing hierarchical patterns" (xii). What McKittrick highlights is that the shifting terrain in which geography – and place – is given meaning depends on the frame and the framer and their past and future attempts to control the terms of these arrangements. Some see hope in this post-Obama election moment in which a new way of framing geographies of difference has given rise to a new way of framing nature. Any general search of "Obama Witch Doctor" within an internet search engine would squash such optimism. Race, in all of its convex permutations, remains a complicated social engine tied to complicated configurations of representations of the world.

Rather than sense in the world order a post-racial framing of the connections, disconnections, or misconnections between humans and their environments, this paper takes up McKittrick's concern with *ungeographies – those considerations of non-beingness attributed to racialisms and racism that render certain people un-real and their habitats openly available for consumption and use.* Although similar in tone and consideration to Marc Augé's notion of supermodernity's *non-places*, McKittrick's ungeographies, when read alongside Eliza-

beth DeLoughrey's articulations of postcolonial ecologies and Rob Nixon's considerations of slow violence, take on a decidedly different power domain. This essay ponders how we can conceivably parcel the framing of nature from the framing of race and racialisms imbued with degeneration, loss, decline, and underdevelopment, especially within sites so seamlessly racialized such as Haiti or Liberia. It raises questions about agency, signs, knowledge, and representation by considering the frames of reference for each of these and the ways that race and racialogy sit too easily at the centre of these social constructions of reality. Centering on case studies, political confrontations, and writing, this paper ultimately asks what is to be done to uncouple ecological "matter" from race.

THE ECOLOGICAL INDIVIDUALISM OF JAAN KAPLINSKI AND ARNE NAESS

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Without a frame of reference nothing makes sense. What lies at the heart of this claim is the fact that human beings, indeed all living systems, depend on signs, not only to survive but also to flourish.

And yet, some have questioned the efficacy of our reliance on symbol-based systems and offered a different path to human advancement and fulfilment. Among those who have expressed disagreement are Jaan Kaplinski, Estonia's renowned contemporary poet and intellectual, and prominent Norwegian philosopher and father of 'deep ecology,' Arne Naess. Despite their many differences, biographical and philosophical, both embrace a vision anchored predominantly in the intuitive, self-organizing and non-calculative. Indeed, they challenge the assumption that cultural mastery, visible or hidden, holds the key to human growth. Although they detect more richness in nature than in human imagination, neither Naess nor Kaplinski asserts that we are fundamentally ill-suited for a world that ultimately happens on its own. Instead of situating the human in opposition to the nonhuman world, both agree that we are part of nature - but not on our own terms. For Kaplinski and Naess, human growth, then, aligns more readily with an ecological widening outward towards the unrehearsed, as one might say, rather than a deepening into a 'universe of signs.'

I AM THE WALRUS: LOCALITY AS A PRINCIPLE FOR CO-MANAGEMENT

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The divergent aims and world-views that have led to tension, distrust, and open conflict between conservationists and indigenous peoples have been recognized as problematic for at least a decade. This unfortunate and potentially avoidable situation puts at odds the two groups most willing and able to preserve sensitive ecological environments from destruction. Recently, successful co-management programs have reported on the methods and organization of cooperative efforts which bring together government agencies with traditional and indigenous communities to protect, observe, and predict the health of complex environmental relationships. While these reports demonstrate the benefits to both biological diversity protection and indigenous/traditional community preservation, what they lack is a coherent and explicit framework that applies to the diverse co-management strategies in action now and which can be implemented in the design of future efforts. This is a large and complex task beyond the scope of the current paper, but as a productive starting point Timo Maran's paper *Ecosemiotic Basis of Locality* can offer a useful vocabulary and the beginnings of a conceptual framework within which the principles of co-management can be elaborated and developed. The literature on current co-management projects demonstrates that locality is a common but inexact term used to describe the relationship of indigenous and traditional peoples with

their native environment. By examining locality from an ecosemiotic perspective, Maran's paper gives insight into the processes by which locality is established and developed as a relationship of mutual conditionality between an environment and its inhabitants that alters both over time. This can provide not only an explanation of why a people's locality generates unique knowledge and understanding of their environment, but it may also suggest ways for traditional cultures to retain their local identities while contributing to global conservation efforts. Using the Eskimo Walrus Commission-U.S. Fish and Wildlife Service co-management agreement as a case study, the applicability of the ecosemiotic basis of locality to a specific co-management project will be examined and its potential for future development within the co-management paradigm will be discussed.

XENOLOGERS AND PEQENINOS: INTER-SPECIES DIALOGUE IN ORSON SCOTT CARD'S *SPEAKER FOR THE DEAD*

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Science Fiction has already proved a fruitful genre for ecocritical analysis because of its extrapolative character and its depiction of the encounter between self and *other.* There are many critics who have focused their research in this field, and a recent example of how Science Fiction can promote environmental awareness is found in the works published in the autumn issue of the journal *Ecozon@,* whose special section entitled "The Invention of Eco-Futures" was edited by Ursula Heise. Following this trend, the purpose of this article is to analyze Orson Scott Card's novel *Speaker for the Dead*, by focusing on its portrayal of nature, the ethics of xenocide, and inter-species communication.

Orson Scott Card is one of the most acclaimed SF writers and *Speaker for the Dead* is the sequel to *Ender's Game,* his most famous book, which has been recently turned into a film. Both novels, winners of the Hugo and Nebula Awards, tell the story of Ender (later called Andrew Wiggins) and the consequences of his role as the xenocide of an extraterrestrial species referred to as "the Buggers," whose only survivor is the Hive Queen. Driven by remorse, Ender becomes a Speaker for the Dead and tells the story of the failed communication between humans and the Buggers, which resulted in the annihilation of the latter with just one surviving individual. From the moment the battle ends, Ender decides to look for a place for the Hive Queen to start a new colony, a venture that finally takes him to Lusitania, the only

planet of this universe were non-human intelligent life has been found.

Lusitania is a colony where humans coexist with an alien species called Peqeninos, also referred to as "piggies." Xenologers, who are alien anthropologists, study the Peqeninos with a series of restrictions that prevent them from "polluting" these aliens' culture, a measure to protect non-human intelligent life after the disaster with the Buggers. Life in Lusitania becomes also difficult because of the existence of a native virus called Descolada, which is lethal to humans without the specific treatment. When one of the xenologers appears vivisected, the xenobiologer decides to call for the Speaker Andrew Wiggins to speak for this death and to help her clarify what has happened. *Speaker for the Dead* is a novel in which the encounter with the *other* is a constant issue. The communication between humans and Peqeninos results in an interesting and intriguing inter-species dialogue that may have catastrophic consequences if misunderstanding prevails. For this reason, my analysis of the novel will focus on the cohabitation of humans and Peqeninos, their problems of communication, and their different approaches to the environment of Lusitania, whose biodiversity is rather limited as a consequence of the Descolada virus.

"NATURE'S HOME – DON'T BUILD IT, GROW IT!": WOODEN FRAMES AND TREE HOUSE DESIGN FROM ANTIQUITY TO THE *FAB TREE HAB*

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James Cameron's 2009 blockbuster movie *Avatar* presents its viewers with fantastic images of the far away planet Pandora, where the local inhabitants live in a huge tree at the heart of a green haven. The tree is a giant, self-sufficient structure with manifold cavities and intersecting branches that highlight the network imagery of the film. It is also an environmentalist take on a motif now common in contemporary science-fiction, namely that of a self-sufficient habitat which is symbiotically integrated into an overarching ecosystem. But whereas the futuristic visions of "arcology" (a fusion of architecture and ecology) are largely based on traditional concepts of urban planning, upholding a division between built or manufactured environment and natural environment, Cameron's film goes one step further: The habitat is not built into the landscape, but rather grows out of it, attesting to a truly pure form of eco-friendly living.

However, Cameron's ideas are not as fresh as they may appear. In fact, they have been around for millennia. The art of "pleaching" or "grafting" trees together was first developed in antiquity to come up with naturally firm and durable structures that depended on organic processes of growth and did not entirely rely on human intervention. Instead of actively building something, involving a laborious cycle of finding, transporting, and working with resources, the simple idea

was to let "nature" do the work herself. In contemporary urban design and architecture, this idea has been revived by, for instance, visionaries like Mitchell Joachim, co-founder of the Brooklyn-based architecture group Terreform One that develops alternative environmental plans for human settlements worldwide. One of his latest projects, developed at MIT, includes the so-called "Fab Tree Hab", an ecological house design based on the idea to grow homes from living native trees with the help of prefabricated reusable scaffolding, using Computer Numeric Controlled (CNC) technology. The end result is a literally living structure, made up of a tree house design that only involves breathing products and organic materials. Instead of living in an environment manufactured by industry, we will, according to this vision, inhabit the environment itself.

Consequently, ancient techniques of "pleaching" as well as present tree house designs actively frame "nature" in order to be, in turn, framed by it. Focusing on the "Fab Tree Hab", this paper seeks to explore how "nature" is conceptualized within the imaginative frameworks of a self-sufficient habitat and of ecological materials as well as how characteristics attributed to it – "growth", "symbiosis", "sustainability" – are appropriated for human technology. In order to do this, architectural designs will be examined, analyzing the interplay between texts, images, and computer simulations, attesting to the ecological imaginary at work in them. Moreover, the intellectual context of the "Fab Tree Hab" will be considered, since the group does not merely cite pressing environmental concerns as a guiding impulse of their work (although it certainly plays an integral role), but rather portrays itself as being indebted to Jeffersonian thinking as well as standing in a long tradition of ecocentrism, notably that of the American Transcendentalists. Thereby, the "Fab Tree Hab" takes on multiple layers of meaning that far exceed the wooden material frames of its construction.

ECOCIDE ON CELLULOID: SILENT RUNNING AS VIETNAM WAR CINEMA

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In 1971, U. S. diplomat L. Craig Johnstone declared that, "[a]t a time when the United States is experiencing a growing environmental consciousness … a policy allowing systematic environmental destruction is both inconsistent and counter-productive." Johnstone was referring to the nine-year-old U. S. policy of "ecocide" in Vietnam, whereby chemical agents were used to destroy foliage and crops – the first use of such tactics in warfare. One year after Johnstone's declaration, the science-fiction film *Silent Running* appeared. Co-written by Michael Cimino and directed by Douglas Trumbull, this tale of a spacecraft-bound U.S. botanist (Bruce Dern) ordered to destroy Earth's last remaining plant life has since achieved cult status, but received little critical attention. Those readings that do exist understand the film primarily as a cautionary tale about domestic environmental practices; an exercise in "what-if" thinking.

In this presentation, however, I seek to place the film within its contemporaneous transnational context, reading it as a timely critique of U.S. ecocide practices in Vietnam. Specifically, I claim that the film frames ecocide as a major shift in the mainstream U.S. understanding of environmentalism and its relationship to militarism: from a 1940s and '50s vision of patriotic stewardship – as epitomized by Smokey Bear

slogans such as "Careless Matches Aid the Axis" – to a 1960s and '70s vision of environmental destruction as foreign policy. That is to say, the film suggests that ecocide in Vietnam was particularly traumatic for U.S. soldiers and citizens because it marked an abrupt turnaround in national environmental ideology. Only in terms of this trauma, I suggest, can we understand *Silent Running*'s histrionic plot – in which our frenzied hero defies his federally-given orders and goes rogue.

In my attempt to bring to light the wartime resonance of *Silent Running*, I place it alongside more obvious touchstones such as *Coming Home* (1978) – the post-Vietnam War film also starring Dern – and *The Deer Hunter* (1978) – perhaps the best-known Vietnam War film, written and directed by *Silent Running* co-writer Cimino. I thereby hope to widen our conception of Vietnam War cinema and, in turn, our understanding of how anti-war sentiment was registered in pop-cultural texts of the time. More broadly, I hope to offer a look at how film indexes the relationship of war and environment – an increasingly timely concern, as the environmental impacts of the U.S. presence in Iraq and Afghanistan, from habitat destruction to Gulf War Veterans' Illnesses, continually come to light.

REFRAMING REALITY: NEW STORIES OF DEATH IN MARGARET ATWOOD'S *MADDADDAM* TRILOGY

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The most significant of cultural "stories" are those we tell about life in relation to death. Death is ungraspable; unknowable; yet our many "cultures of death" (Derrida *Aporias* 1993) play an important part in shaping who we variously are. Death plays a role, not just in the ways we understand life and in our living practices but in our relations too with the non-human world. Within the rise of the modern West, the quest to free ourselves from such "constraints of nature" as sickness and death (Cranston 1967) was accompanied by a corresponding drive for "progress," whereby death was placed on a plane of avoidance. As noted by death historian Philippe Ariès, what was once the "tame" death of the Middle Ages became a death that was now "wild," hidden behind hospital curtains (1991). Evacuating "nature" and "death" from the self turns out in the contemporary present, however, to have been a false move. To overthrow nature in the drive for survival is to call death's rebound upon us in the form of "environmental crisis."

As death looms upon us, threatening us into reforming our ways, environmental crisis may appear as the new doom-mongering device; yet is this not just the old story? In this paper I consider a "new" story being told in fiction in the present. In a certain strand of environmental crisis fiction – discussed in this paper using the example of Margaret Atwood's Maddaddam Trilogy – we see death presented, not as a threat, but as a reminder of our own mortality. In such fic-

tion it appears that we are asked to consider a *re-taming* of death, the rationale being that not only is death inescapable but it is part of who we are, defining too our relations with the non-human world. In this paper, I thus seek to illustrate how this imperative to "face death," seen in a certain strand of contemporary fiction, is currently performing a critical reframing of our relations with the non-human world. This contemporary positioning of the human in the non-human appears as part of a new story – one that has to do with rethinking or remembering our relations with our own mortal state.

FRAMING SCIENCE IN THE FILMS OF JEAN PAINLEVE

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Jean Painlevé (France 1902-1989), scientist and filmmaker, dedicated much of his time and energy to creating over two hundred scientific documentaries during his long and fruitful career. Framing is in this case both literal and figurative: shots are not only framed technically (and using by today's standards very rudimentary means); they are also and very notably framed in accordance with Painlevé's esthetic and ethical concerns. Indeed, he framed most of his short films in three ways depending on whether the target audience was composed of scientists, school children or general viewers. In this presentation, we are interested in the shorts made for the general public which clearly demonstrate Painlevé's conception of a good documentary as an expression of the director's profound convictions.

The films studied – The Seahorse, The Octopus, the Vampire Bat – will be examined within the scientific, pedagogic and "all audience" frames. Although there have been recent articles on Painlevé, many of which are assembled in *Science is Fiction: The Films of Jean Painlevé,* 2001 (Andy Masaki Bellows, Marina McDougall and Brigitte Berg, editors and contributors), as well as the Criterion Collection's 2009 DVD that presents 23 of Painlevés best known works, individual films have not yet been studied in detail. Why does the documentarist choose to showcase certain animals in the first place? What are the dominant frames used in each? How do the semiotic means that Painlevé adopts (e.g., music, time lapse, close-up, inter-titles, inserted images) convey his personal beliefs?

It will be shown that Painlevé's dominant frame is non-anthropocentric. Human culture and nature are not opposed but interdependent. Always somewhat of a rebel, he shared with the surrealists of his time contempt for bourgeois values. But he went even further than they due to his decidedly non-androcentric point of view, denouncing male and female stereotypes. In this way, framing does indeed hold ecological implications in the films of Jean Painlevé.

THE POSTCOLONIAL TOXIC GOTHIC IN ROBERT BARCLAY'S MEḶAḶ: A NOVEL OF THE PACIFIC

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Environmental justice research has shown that environmental degradation and exploitation have conspicuously adverse effects on economically and politically marginalized communities in the global South. In his recent book, *Slow Violence and the Environmentalism of the Poor* (2011), Rob Nixon analyses the role of activist writers who decry the exploitation and contamination of the environments of the poor in their works. Nixon argues persuasively that economic and political structures of oppression corroborate and enhance the negative effects of the environmental crisis, engendering a new form of violence, a "slow violence" (Nixon 2). Characteristic of slow violence is that "its calamitous repercussions [are] playing out across a range of temporal scales" (ibid.) and, he proceeds to add, also across space. This complex temporality provides a major representational challenge to authors who engage with issues of environmental injustice and slow violence.

In this paper, I'm analyzing Robert Barclay's novel *Meḷaḷ: A Novel of the Pacific* (2002) and the narrative strategies he uses to foreground the temporal complexity of nuclear colonialism's slow violence on the Marshall Islands. In the years between 1946 and 1963, when the archipelago served as a nuclear test site for the U.S. military, more than 90 nuclear devices were detonated, to the effect that many islands remain uninhabitable until today and a great number of Marshallese suffer from severe health disorders, like cancer, infertility or birth de-

fects (Robie 30).

The novel has an interesting narrative framework with two converging story lines. The contemporary narrative strand is told in the past tense, whereas the mythological narrative strand, which stretches from a "time even before time itself" (Barclay 27) onward, is presented in the present tense. This temporal framing suggests a correlation of environmental time with the temporality of Marshallese mythology. It thereby not only embeds the Marshall Islands' nuclear colonial history within a history of prolonged colonial occupation, but also foregrounds the Islands' precarious situation as endangered habitable space as a result of human agency (cf. Chakrabarty's "geological agents", 206). Apart from contextualising the environmental destruction of the Marshall Islands within these more encompassing temporalities, the novel also discloses the oppressive historical and political complexities of colonialism. By employing something that I call 'postcolonial toxic gothic', Barclay draws attention to the contaminating, corroding and pathogenic repercussions of nuclear colonialism. Referring to demonic presences from Marshallese mythology, the novel merges the gothic imagery characteristic of toxic discourses (Buell 38) with indigenous mythology. The 'postcolonial toxic gothic', thus, discloses contingencies between gothic representations of toxic contamination in a postcolonial condition and their origin in the 'magical' reality of indigenous cosmology.

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TOWARD A POLITICIZED ECO-WRITING: THE "CHERNOBYL" CASE

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Writing from an ecological perspective is considered to be an open system which embraces the interdisciplinary agendas of complexity systems in conjunction with ecological methodologies and moves away from ecology as a strictly scientific methodological approach towards a more complex ecological understanding of writing (Coe 2001). The ecological model of writing (ecowriting, ecocomposition) is an activity through which a person is engaged with a variety of socially constituted systems in order to be an active participant of ecological consciousness formation (Cooper 1998).

Post-Chernobyl eco-writing is a bright example of the ideas mentioned by R. Coe and M. Cooper. The explosion at the Chernobyl nuclear power plant (April 26, 1986) was a watershed event in the East-European ecological consciousness, but it did not find prompt representation in literature. That arrived some years later. But in the first year – only brief official information and plenty of gossips about "something has happened" and occasional meetings with people, evacuated from the Zone.

The accident at the Chernobyl nuclear power plant produced a range of ecologically-directed publications as well as enabling the appearance of "ecological nonfiction/documentaries" (so-called "writings on ecological affairs") and "ecological memoirs" (representing the "writer's ecological approach"). This diversity of narrative form in writings about Chernobyl gives critics the opportunity to study their

common generic features and define "the Chernobyl genre". The fact is that their authors were not professional writers but rather the witnesses of the explosion at the Chernobyl nuclear power plant. Their responses to the nuclear accident were extremely dynamic. Chernobyl genre has a unique feature – these authors tried to reveal the truth under circumstances of total secrecy and gossip about the Chernobyl accidents in poetic forms and memoirs. But the writers' and critics' responses to these and other works were restrained and low-key.

The reasons for this are well known. In the first years after the Chernobyl tragedy reporting any information dealing with the accident was prohibited; journalists and literary authors were only allowed to repeat the only official – governmental – point of view on this catastrophe. Only later, in spite of all obstacles and prohibitions, the society became aware of Chernobyl as a technical accident that had global ecological effects.

This nuclear catastrophe as well as other alarming factors made the East-European society face the necessity of getting informed of the truth about itself. The literature of the post-Chernobyl period should be viewed through the lens of how the Chernobyl nuclear accident helps early post-Soviet eco-writing address questions of truth and human morality.

Only studying the amalgamation of these – social and political as well as technological – components can lead to the next phase of ecological approaches to theorizing eco-writing.

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THE SEA AS AGENTIC SWAMP: GOETHE AND MANN IN VENICE

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In the marshy, swampy waters on the Mediterranean coast in Venice, Goethe and Mann portray themselves entering hybridized spaces with transformative bodily and ecological relations. Goethe describes Venice as a swamp in his *Italian Travels*; that is, as a fluctuating zone of water and land shaped by tides, shifting grounds, filthy canals, and glorious art. He flees, however, rather preemptively from Venice, noting a need to escape from the fluidity back to his solid "gardens and possessions." The swamp thus stands in Goethe's writings as a sign of uncomfortable natureculture always on the edge of becoming fully uncontained, a sign of combined ecological and anthropogenic impacts written as cultural development engaging with incessant floods, ever reemerging mud, and edible snails but also the oppressive weight of the Italian masters. Mann's Aschenbach in "Death in Venice" also experiences Venice as a "contact zone," albeit with different nuances shaping his body and actions, and finally leading to his demise. The land/seascape as "swamp" pervades the story in both cases with materiality's disturbingly agentic capacity emerging from the fully interwoven elements and built environment.

FROM PINE TREES TO GREEN WOMEN: ECOFEMINIST ECOLOGIES IN ANITA DESAI'S AND MONIQUE ROFFEY'S WORK

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Both Anita Desai (b. 1937) and Monique Roffey (b. 1965) turn a delicate eye to nature, which forms an immediate presence in their works and largely comprises their idiosyncrasy. Taking Roffey's novel *The White Woman on the Green Bicycle* and Desai's *Fire on the Mountain*, as my points of departure, I am interested in the (material) ecofeminist layer of the texts.

Nature forms not just an intense presence but is portrayed in a provocative way. Speaking out either metaphorically or directly, it functions as a juxtaposition to human communication and silence, thereby illustrating some of the novels' problematic. Desai's narrative displays a strong visual and auditory quality, while nature is juxtaposed with the isolated characters. Roffey's similar concern with nature indicates a material ecofeminist ethic, challenging anthropocentric humanism and envisioning an uncannily different reality – the hills have not only an ability to talk but emerge as a green mountain woman, shattering the anthropocentric core of the concept of agency and voice.

The equation of nature and women is not as essentialist in Desai's work; however, ecofeminist ecologies serve as connecting tissues between the novels. While in Roffey's work nature is colonised and named, Desai problematises the issue of polluted nature. Parallel to the treatment of nature, identity is constructed *for* the female protagonists. The (non)identification with nature serves as the main strand

of the novels, explaining the very significance of nature. While Roffey's concern with nature highlights material ecofeminist ethic, I am particularly interested in whether Desai, representing an older generation, could also be read in this vibrant perspective.

WHAT IS A '*LOODUSLIK TAIM*' (A 'WILD PLANT') FOR ESTONIAN CHILDREN

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Estonian Literary Museum, Estonia

In interdisciplinary studies, emic concepts are often defined through etic perspectives. One such concept is a wild (edible) plant, discussed widely in ethnobotanical literature concerned mainly with pre-industrial regions, whereas Europe is not considered a particularly interesting area for the research. The emic concept of 'wild plant' differs greatly, depending on several factors, and cannot be framed universally, unless it is retracted into the etic concept. Hence, working within the realm of European ethnobotany, one needs to understand the emic concept of 'the wild' of the respondents, especially if the method of research is non-participatory.

In 2011-2012 the authors conducted research on the use of wild edible plants in Estonia during the childhood of the respondents. Electronic or printed questionnaires were distributed through numerous subject-listservs, interest groups and also in one school. The questionnaire asked the respondents to list the uses of wild edible plants encountered during their childhood and to provide several additional details (for detailed methodology, cf. Kalle and Sõukand 2013, Sõukand and Kalle 2013). Since there is no specific word to describe the concept of wild plant in Estonian, the topic was ex-

plained using two partially overlapping phrases: *looduslik taim* (natural plant) and *metsikult kasvav taim* (wild-growing plant). In addition, a question addressing the concept was asked: what was considered to be a '*looduslik taim*' in your childhood?

250 responses were received from people of different age, education, and background. While the majority of the respondents had a high education, about 60 answers were provided by schoolchildren of 15-18 years. Among all respondents, almost 90% answered the additional question on the concept of '*looduslik taim*'. Although the length and depth of the answers varied greatly, there were certain tendencies, which allow for generalizations and mapping of the concept. Inclusion (those that grow in nature (wild), growing on their own), opposition (those not cultivated, growing without the help of a human) and broad generalizations (all that grows) were discussed most frequently. A remarkable number of answers voiced the opinion that there is no consideration of what a '*looduslik taim*' is among the children. Nevertheless, the majority of respondents intuitively provided a list of *wild* edible plants, although from time to time certain plants cultivated for food were also present, as well as those run wild absent and provided on future request. Sometimes the respondents hesitated whether they understood the task properly and what plants should be included.

In the presentation we will address the answers provided, mapping the etic concept through the answers provided to the specific question and its correlation with the number and nomenclature of the species provided.

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FRAMING TRANSLATION

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Translation as transplantation is one of the well-known metaphoric images used to characterise the activity of translating and its resultant product, translation. The image of transplantation brings to the foreground the context-bound aspects of translation: in both the case of transplanting and the case of translating what matters is the competence of separating the plant/text from its original environment and habitual relations and its transfer into a new environment to which a plant/text may or may not adapt to (Sütiste 2011).

According to Juri Lotman, "the elementary mechanism of translating is dialogue". Lotman emphasises that a dialogue does not start from a common language known to both participants, but "the need for dialogue, the dialogic situation, precedes both real dialogue and even the existence of a language in which to conduct it" (Lotman 2000: 143–144). In accordance with this view, the beginnings of translation can be traced back to exchange of information between *Umwelten* of different species, including human (Kull, Torop 2003). This means that translation is originally related to corporality and to the interpretation of the environment (zoosemiotic modelling, Sebeok 1991) and only subsequently to the linguistic relations characteristic of the human species.

History of human verbal translation abounds in conceptualizations describing and/or prescribing how a translation can/should handle the change of context from the source text to the target text. For instance, a well-known dichotomy, foreignizing *vs*. domesticating

translation is expressive of the view whether context should be taken into account or not: in case of foreignization, translation essentially disregards the change of context, while domestication sees change of context as relevant and adapts the text to the target circumstances.

The notion of context has long been regarded as central to the study of translation. Despite this, in general the issue has received rather modest academic attention. While in recent years there have appeared publications with context as their focus (e.g. Nida 2001, Baker 2006, House 2006), their field of application is restricted to human (verbal) translation.

This presentation seeks to (re)frame human verbal translation by

a) contextualising translation in the evolution of the human species;

b) contextualising translation among other communicational and signifying practices;

c) reconceptualising some traditional translation theoretical notions from the viewpoint of their (explicit or implicit) reliance on the notion of context.

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TRANSMODERN CONDITION AND HUMAN ECOLOGY

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Mainstream Western philosophy, as we know it at the start of the 21st century, has stayed in the shadows cast over the mind-world by Aristotle and then, after a long lapse, by the French post-Renaissance philosopher René Descartes, who asserted the world of ideas and reason as being superior to nature and the senses, and insisted that a person exists only as ideas. The same has been said by some influential French thinkers of the 20th century, such as Jacques Derrida and Michel Foucault. They inspired a whole generation of keen followers, the so-called postmodern(ist)s.

By the second decade of the 21st century, however, we must doubt whether their ambitions of establishing an everlasting age of totally liberalized ideas, with no moral nucleus, can satisfy the spiritual needs of the younger generations, those born in the 1980s and after. The introduction of the prefix "post-" itself, in its attempt to determine a kind of superiority over preceding ages, their culture and creation, starts to look suspicious. Even if it could satisfy the Western "centers" – which is far from being certain –, would it respond to the challenges of "edges", "peripheries", those non-Western parts of the world where the majority of our globe's population lives?

Time continues its flow, annihilating all "posts," and revealing to the living world new beginnings, young love, and fresh hopes. The nameless and the undefined abolish all names and definitions, including those concocted by the most astute among human minds. It is quite possible

that the notion of "modernity" itself has come to exhaustion. The world in its immense diversity may well need another, different emblem that would suit its need of survival better than "modernism".

I will try to develop some of my ideas expressed in my book *A Call for Cultural Symbiosis* (Toronto: Guernica, 2005) and in my most recent (as yet unpublished) essay book, *Ten Letters to Montaigne. "Self" and "Other"*. The focus will be on the need of a symbiotic co-existence, which basically means seeking a new cultural ecology for the world. I claim that historical womankind has a decisive role in it.

ON THE MATERIAL DYNAMICS OF WRITING: THE EXTENDED ECOLOGY VIEW

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'Language' is one particular manifestation and organization of the dynamic matter-energy-information flows that constitute the material reality of the world. Molecules, genes, cells, minerals, and words, for instance, are all "different manifestations of" and different expressions of this single reality (De Landa 1997: 21). The human organism is one such momentary arresting of flows of minerals and biomass. Moreover, assemblages of human organisms (bodies) that interact with each are subjected to flows of norms that stabilize the forms of interaction and give resilience to them such that they are less susceptible to perturbation by exogenous factors (De Landa 1997: 107) Rather than saying that there are different orders of reality – e.g., physical, chemical, biological, social, and semiotic/linguistic – and that each order so postulated represents a new stage in the evolutionary progression that culminates in human language, or that language is a system of the "fourth order of complexity" (Matthiessen 2009: 206), it is more accurate to say that each successive emergence results in interactions and coexistences of different kinds between these 'strata' of reality (De Landa 1997: 21). Moreover, each new stratum or layer is animated by self-organizing processes that are common to all of them. Writing is a case in point. Writing is usually viewed as a supreme human cultural achievement. Writing is thus opposed to 'nature'. But what would a view of writing

as simultaneously and irreducibly geological, biological, social, cultural, and linguistic look like? In the paper, I will examine how writers and readers participate in trajectories of becoming when they become entangled with the plurality of connections engendered by the many ways in which writing threads out into and takes part in the lines of becoming that link writing, persons, artefacts, and so on in the extended human ecology. I shall examine examples of the ways in which the exercise of sensorimotor knowledge in the tracing of materially inscribed lines of writing constitute paths of interactivity – trajectories of becoming – such that writing does not 'stand for' things in the world, but maps pathways and trajectories of movement and becoming by orchestrating diverse materials and directing their flows along pathways that lead us into the world. In this view, lines of writing do not connect points, but are entanglements of threads that are experienced as events – a haecceities – manifesting dynamic and vital energies during the processes of sensor-motor engagement with and exploration of the unfolding lines of the text. To understand how this is possible, we need to see writing as a specific instance of interactions and coexistences of different strata – e.g., geological, biological, social, cultural, linguistic – such that that writing, seen as the quintessential achievement of human culture, is framed by all of these strata at the same time that it has the capacity to frame them.

ANIMALS QUA SENTIENT BEINGS VS. ANIMALS QUA RESOURCES: A CRITICAL READING OF THE MENTIONS OF ANIMALS IN NORWEGIAN POLITICAL PARTY PROGRAMS

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Inspired by Stibbe 2012, this paper presents the main findings of a simple linguistic study of the programs for the parliamentary term 2013-2017 of Norway's nine biggest political parties. The corpus consists of 12 programs, since three of the parties operate with two programs, one focused on principles and the other on more practical questions. The study is divided into two parts, a word/morpheme frequency study, involving 23 entries with altogether 28 search terms (including "dyr" [animal], "dyreetikk" [animal ethics], "dyrevelferd" [animal welfare], "fisk" [fish], "fugl" [bird]), "rovdyr" [predator(s)] and a number of common animals) and a morpheme occurrence study. The latter results in complete overviews over the vocabulary applied in these political programs containing the morphemes "dyr" [animal], "rein" [reindeer] and "fisk" [fish].

The findings of the second part of the analysis show that the three mentioned morphemes are often included in wordings that imply a systematic omission of basic aspects of animal life and behaviour. In particular, the morphemes "fisk" [fish] and "rein" [reindeer] are predominantly, in fact almost exclusively, to be found in conceptual structures that constitute an objectification of animals, usually by reducing them to economic resources. This observation is consistent with one of the findings of the first part of the study, namely that "fisk" [fish],

which is economically important in Norway, is mentioned some 300 times altogether in the corpus, whereas "fugl" [bird] is mentioned only 3 times. Even when applied as a word, "fisk" [fish] rarely refers to fish as living, sentient beings, but most often rather to fish products and governmental management of fisheries.

There are a few instances of statements connecting animal welfare and the like to the fishy vocabulary, but there is otherwise little correlation between the positive statements about animal ethics etc. on the one hand and the use of language whenever animals are mentioned elsewhere in the party programs on the other. The analysis thus shows that the choices of words that have been made in formulating the parties' policies for this parliamentary term in sum reveal a deep-seated anthropocentrism which stands in direct contrast to the good intentions, officially shared by several of the analyzed parties, of getting animal ethics higher up on the political agenda.

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HISTORY AND NATURE: *UMWELT* IN AMITAV GHOSH'S *THE HUNGRY TIDE*

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This paper purports to scrutinize the contemporary Indian novelist Amitav Ghosh's *The Hungry Tide* in terms of the cross-fertilization between history and nature, *Umwelt* and *Unwelten*. As a novel set in the Sundarbans in postcolonial India, *The Hungry Tide* provides a critical bridge connecting two unrelated fields of exploration undertaken by Kanai and Piya, the two main characters representing two conflicting worldviews: one is a metropolitan cultural translator who described Canning as "a horrible, muddy little town," the other a cetological scientist focusing only on objective scientific research on whales and other animals. Though both are of Indian origin, they are culturally detached from the fauna and flora of the soil in the Sundarbans. Through the interactions between the metropolitans (Kanai and Piya) and the local people (Nirmal, Nilima, Kusum, and Fokir), the tension between the colonial past and the unchanged present are juxtaposed and acted out as an oppressive mechanism. Instead of privileging one over the other, the various locales in the Sundarbans are not understood as static backdrops, as perceived by these two metropolitan outsiders, but as a palimpsest of becoming. In *The Hungry Tide*, the beauty of the Sundarbans is harsh, terrifying, and wild with crocodiles, snakes and man eating tigers roaming around, thus its portrayal of place goes beyond romanticism and idealism. By bringing Kanai's and Piya's personal contacts with the local people to bear

with the massacre of Morichjhpi and the creation of Sir Daniel Hamilton's utopian society in the Sundabans, Ghosh suggests that there are possibilities of future redemption in the past. Based on Dryzek's "ecological rationality" that is characterized by negative principles of feedback and self-organizing systems in the interaction between social and ecological communication, I try to bring Uexküll's *Umwelt* and Ghosh's ethico-bioregionalism to bear with autopoiesis with a special focus on the characters' potential emotional and intellectual transformation and the will to live as the foundation of life in relation to Agambenian biopolitics.

REFRAMING: NON-HUMAN *UMWELT* AND HUMAN ANIMAL LEBENSWELT IN THE WORK OF VAN DER KEUKEN

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This paper considers how the issue of nature and its relationship to human semiosis is developed in the work of the late Dutch filmmaker Johan van der Keuken. By doing so, I engage with the recent work of John Deely and Jesper Hoffmeyer. The former has attempted to make important distinctions between the *Umwelts* of non-human animals and the unique life-world of human beings while the latter is known for his work on "semiotic freedom". Van der Keuken's work serves as a vehicle for exploring and developing these ideas, thus also drawing some much needed connections between the burgeoning field of bio-semiotics and Peirce's (biologically inflected) work on human inquiry.

I shall be looking principally at a well-known film within ecological studies, *The Flat Jungle* (1978), while also briefly considering a few key moments in *Face Value* (1991) and *Amsterdam Global Village* (1994). *The Flat Jungle* has been described by the French film critic Serge Daney as a work which engaged with the theme of ecology before it became fashionable. Daney also highlighted the fact that formally the film consists of a series of connections and networks that exist at all levels of micro and macro habitat. I shall be providing specific examples of how van der Keuken uses both camera movement and editing to constantly reframe – through the use of slightly off-centre compositions, displacements, and a set of apparent repetations. All of this suggests the impossibility of a view from afar outside either the animate creature re-

acting to its environment or beyond the recalcitrant experience of human inquiry. Van der Keuken gives equal room to the life-worlds of sun and water, plants, non-human animals, and human animals – this suggesting a common phenomenological process of adaptation to specific environments, characterised by the qualitative immediacy of Firstness, the rupture of Secondness, and the mediation of Thirdness.

Nevertheless, I shall also be drawing our attention to how van der Keuken distinguishes the human *lebenswelt* from non-human *Umwelts* without demarcating a definitive separation. What makes us human is not only language, but a unique (but always fallible capacity) to distinguish truthhood from falsehood, which is dependent on the existence of semiotic objects rather than merely things (Deely 2002). This is manifested through the existence of dissent and disagreement and the rejection of arbitrary authority. In other words, we might also consider the human *lebenswelt* in epistemic terms, whereby human action occurs against a background of beliefs and a continuing capacity to alter our beliefs in the face of recalcitrant experience. This might be one way of considering semiotic freedom and creativity (Hoffmeyer 1996, Wheeler 2006) in terms which are grounded epistemically and ontologically (Talisse 2009).

Finally, this also takes into account a unique human awareness of mortality – and hence an unlimited community of inquiry – that does not constitute a definitive divorce between natural and cultural signs, but rather a vital incorporation of the former within the latter.

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WHOSE NATURE? TEXTUAL REPRESENATIONS OF VILSANDI NATURE RESERVE, ESTONIA

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During the turbulent twentieth century, the natural environment, as well as people in Europe, have been subject to several different ideologies and ideas. Varying understanding of environmental resources and of the proper ways of using them has shaped and re-shaped, among other aspects of society, the ideological basis of nature protection and its practical implementation.

In the presentation I will examine these dynamics on the example of literary representations of Vilsandi Nature Reseve, located on small islets off the westernmost coast of Estonia. Private bird protection started there in 1906; the area was declared a bird sanctuary by Naturforscher-verein zu Riga in 1910; a Soviet State Nature reserve in 1957; and a National Park by the Republic of Estonia in 1993. My primary source material in examining the conceptualising and framing strategies of the island fauna and flora in the name of nature protection is nature writing by German, Baltic German and Estonian authors, such as Franz Xaver Zedtwitz, Ferdinand Erdmann Stoll, Johannes Piiper, Alma Thom, and Fred Jüssi.

Literary representations enable us to witness stories of utopia and idealism, and of exclusion and rejection, not only of certain human groups, but also of other species, such as seagulls or cormorants. Whose nature? Whose resource? Whose ideology? are the recurrent questions that echo in the textual representations of the islet nature. In the analysis of the relevant body of nature writing I strive to in-

dicate the overlappings and the common ground in the ideological basis of nature protection of the different time periods, as well as to point out principal break-offs and deviations that occur in association with the changes in social formations and affect a number of other species beyond humans.

SCENERY AND SCENOGRAPHY: THE ENVIRONMENTAL EXPERIENCE OF LANDSCAPE IN A THEATRE PERFORMANCE

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Theatre is usually understood as framed space: either by a proscenium arch or the so called magical circle of spectators. A performance is the temporary materialization of fiction in real space that by definition stands apart from the real world.

The Estonian open-air theatre has established a particular tradition, which is characterized by performing in natural landscapes, usually away from urban centres, where the landscape itself acts as a natural scenery for the performance.

This trend also works in the opposite direction: instead of framing it strives to demolish the border between audience and performance space, and furthermore, to create an illusion of a fictional space that potentially envelops the entire world. The scenography of such performances makes minimal intervention; rather, it attempts to present the given landscape as the original (or at least conceivable) space of events. As such, they can be analyzed in terms of aesthetic engagement originally proposed by Berleant to describe the aesthetic experience of environments of which the perceiver is an integral part. However, such scenography works as a single setting and does not react to the changes in scene and scenery, time and place. It raises the question, how is it possible to have an environmental aesthetic experience a fictional place when it not visually (or otherwise) indicated?

On the example of Estonian open air performances the paper investigates the structure of environmental scenography as a hermeneutic play, in which meanings on the environment are created together between the performers and the audience. Places (and place experiences) are created as fictional agreements that last for the time of the performance. In doing so, the framing function usually determined by the use of space becomes void. What frames the landscape then?

FRAMING NATURE, CULTURE AND CAPITAL: A TRANSVERSAL ECODOMICS

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Phusis Kruptesthai Philei, "nature loves to hide," a maxim attributed to Heraclitus might be one of the Western world's earliest framings of nature and culture and, arguably, a very influential one for much subsequent hermeneutics. In this spirit, the Conference "Framing Nature," to be held at the storied University of Tartu, could not have a more appropriate setting. The CFP calls us to reflect on how there is "no meaning without a frame." Indeed, and I would like to particularly address that seminal question, with its crucial: "in framing nature, human collectives also frame themselves," and very relevant for our contemporary moment, how: "conflicts between different peoples or social groups over the use of natural resources are always also conflicts between different ways of framing nature, which can be told as stories of material and semiotic exclusion."

My current research as well as my professional, governmental, and academic experience has forced me to ask these questions continuously, and, today, four major crisis areas captivate my attention, and make me think that an epistemological and genealogical reflection on their possible etiology may give us some light on the way we have been framing this nature/culture conversation for centuries now, sowing the seeds of a monumental estrangement and dislocation, whose consequences now are for all to see. Except for the most vested interests, there is a crucial need to understand the origins and con-

text of such situation, so that new and more appropriate avenues of understanding and engagement may be found. The four areas I suggest are: Economics, Globalization, Environment, and Technology. They carry within themselves, paradoxically but hopefully, a hidden dimension, namely, their etymological, rhizomatic, hermeneutic, and transversal link to *Oikos*, and to each other. These are the cryptic "signatures" that I would like to unpack through a concept/practice that I am calling *EcoDomics*, as a contribution to the larger interrogations you are inviting us to make.

Following such baseline, and not being an expert in biosemiotics, but acknowledging its profound insights, and attending to Ecocriticism's and Derrida's *parergonal* supplement, I would try to compare more amply some genealogies of integration for the above four areas, directed toward some of the biopolitical, cultural-historical, cognitive, and politico-economic dimensions of this "nature framing," in the "transversal" manner of Foucault's *The Birth of Biopolitics*, Guattari's *Three Ecologies*, Genoskos's *Félix Guattari in the Age of Semiocapitalism*, Derrida's *The Truth in Painting*, Agamben's *The Signature of All Things*, Foster et al., *The Ecological Rift*, Cooper's *Life as Surplus*, Fisher's *Capitalist Realism*, Escobar's *Territories of Difference (New Ecologies for the 21st Century)*, Morton's *Ecology Without Nature*, and Agrawal's *Environmentality*. My exercise would attempt to depict why, and perhaps how, "transversality," as Guattari in particular understood it, might be a bridge to additional ways to face the conundrum of being framers and framed at the same time, and of imagining and envisioning ways-other to the deleterious "naturalization" of contemporary semiocapitalism.

AFFECTIVE ENGAGEMENT AND RISK PERCEPTION IN TWO CLIMATE CHANGE DOCUMENTARIES

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The paper will present the results of a pilot study that explores the ways in which two recent environmental documentaries – Jeff Orlowski's *Chasing Ice* (USA, 2012) and Hannes Lang's *PEAK* (Germany and Italy, 2011) – cue affective responses in individual viewers and how such responses are related to these viewers' climate risk perceptions.

Chasing Ice documents National Geographic photographer James Balog's expedition to the Arctic region for his *Extreme Ice Survey* project. With powerful images, the film combines a dramatic human interest story with breathtaking shots of calving glaciers, thus offering an exciting and emotionally engaging viewing experience. The film's subject, however, is far removed from the everyday experiences and concerns of most of its viewers. *PEAK* uses a very different approach: the film's slow pace and static long shots aim to capture the world of Alpine ski tourism and to reveal what is normally hidden beneath a thick layer of artificial snow: the massive modification of the landscape and the enormous challenge posed by climate change to those whose livelihood depends on the ever more volatile winter weather and the steadily retreating glaciers.

The paper will explore how the very different subject matters and aesthetic qualities of the two films affect viewer responses in Austria and Germany. In particular, it will focus on the documentaries' interaction with viewers' risk perceptions with regard to the ecological

and societal effects of climate change. The study combines empirical reception research using questionnaires, individual interviews, and group interviews with close analysis of specific film passages that have been indicated by viewers as particularly affecting, powerful, or thought provoking. It compares the responses of three different viewer groups in Austria and Germany and relies on a combination of cognitive film theory and affect theory in its analysis of both the films and the viewer responses.

IN THE ABSENCE OF SPARROWS

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The disappearance of a species – and the related conservation practices that hurriedly attend such an 'event' – has recently begun to receive considerable attention within the environmental humanities. More-than-human geographers Hinchliffe, Lorimer and Yusoff have all argued in their own ways that the representational practices involved in biodiversity conservation work to 'frame' nature through presence – a process which is by its very nature both necessary and reductive, and perhaps, as Yusoff suggests, paradoxical. In this paper I build upon such work, taking the case of the decline and conservation of a formerly ubiquitous bird – the house sparrow (*Passer domesticus*) – in London, England. Following from my own encounters with efforts by the Royal Society for the Protection of Birds to establish causes for sparrow decline and attempt to remedy it, I hope to articulate what happens when species (don't) meet at the junctures of biodiversity conservation practice. In doing so, I examine how the London House Sparrows Parks Project negotiates notions of absence and presence in its dealing with the birds. In essence, where previous studies have prioritised the ubiquity of presence, I argue for a more nuanced understanding of the modes of framing involved in house sparrow conservation – one which draws instead on Derrida's notions of hauntings, the spectral and the supplement. Rather than taking simple absence, loss and mourning as my focus, I suggest that house sparrow decline

is generative: of new modes of human engagement with species and places, but also of new ways of 'being-sparrow' and stories that the birds themselves might narrate about the spaces we (don't) share. Overall, my own framing of the plight of the house sparrow here hopes to suggest that the story of the near extinction of this species in central London is more than a tale of a straightforward absence of a particular bird from one place.

FRAMING WOMEN AS ANIMALS IN THE FASHION WORLD

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In 2003, the ecofeminist Carol J. Adams denounced in her book *The Pornography of Meat* the animalization of women in advertising as perpetuating the oppression of both women and animals. However, since the 1990s, a major animal rights group, PETA (People for the Ethical Treatment of Animals), has often used the woman-animal identification in its campaigns against the use of animals as meat and fur. Although it is true that some of PETA's depictions of women as animals incur in the sexualization of female bodies and the trivialization of violence against women, at times PETA also manages to create images of women's empowerment. The same phenomenon is true in some renderings of women and animals in the fashion world. Hence the recent campaigns by Bulgari (Mon Jasmin Noir 2012), Uno de 50 (2012 Campaign), and Lolita Lempicka (Le Premier Parfum 2012) feature women side by side with wild animals. These images, however, fall into the trap of essentializing the relationship between women and animals as derived from an instinctual connection with nature, and thus insist in the disconnection of women from culture. They also emphasize, by framing their relationship into the mold of the Beauty and the Beast story, the conceptualization of women as domestic or civilizing force and men as uncivilized or untamed.

Nonetheless, the British designer Alexander McQueen (1969-

2010) offers a more complex scenario in his fashion shows. Known as *l'enfant terrible* of British fashion design, from the beginning of his career in 1992 he demonstrated a will to break away from tradition. He turned his fashion shows into performances where models acted as actresses and dancers who enacted stories that reflected some of the preoccupations of his time: domestic violence, the place of women in Islam, species extinction, and climate change among others. He also showed his fascination with the natural world by literally turning his models into animals through the use of very intricate headgear, fixing bird heads or antlers in their jackets, or using animal print fabrics.

Although McQueen was criticized by animal activists for his use of fur and by feminists for his victimization of women, this paper will argue that in McQueen's collections there is an undercurrent of discontent with the most prevailing systems of oppression: sexism, racism, ableism, and speciesism. With this I want to prove that beyond the contradictory nature of McQueen's fashion shows there is a discourse of liberation from oppression which prompts a reflection on some of the same topics that are at the core of recent ecocritical debate. This ultimately serves to indicate the multifarious semiotic value of artistic expression.

PAROCHIAL HISTORIES: THE POETICS OF ECOLOGICAL RECORD-KEEPING AND MATERIAL CHANGE

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This garden that I have before my eyes appears differently to me now from a moment ago. I have understood the rhythms: trees, flowers, birds and insects. They form a polyrhythmia with the surroundings: the simultaneity of the present (therefore of presence), the apparent immobility that contains one thousand and one one movements etc...).

Henri Lefebvre, Rhythmanalysis (1992)

Lefebvre's parenthetical aside, in the first essay of his study of space and rhythm as lived experience in the modern era (dated from the French Revolution), puts him momentarily in the place of Gilbert White, churchman and daily recorder of environmental phenomena in his parish and garden in eighteenth-century Hampshire. The publication of The Natural History of Selborne also in 1789, I suggest, makes this text too a product of modernity, a suburban/rural parallel to Lefebvre's urban habitat that this paper will consider in terms of the paradigmatic 'frames' that daily record keeping gives to modern ecological thought. Responding differently to Richard Mabey's (fond) characterisation of White's volume as demonstrating 'wilful parochialism at a time of social revolution', this paper seeks the broader culture of 'framing' that was constituted by commitments to careful, rhythmic observation of local habitat ('this garden that I have before my eyes') in which White's work participates in late-eighteenth cen-

tury England. In line with the conference's theme of 'Framing Nature', the research presented is sensitive especially to the shaping effects of genre -- the diary, the letter, the garden calendar, the tabulated record of quantitative data, the poem (a genre regularly editorially expunged from White's composite volume) -- on the archive we have (or might recover) of environmental change at an earlier period of landscape crisis. Responding specifically to the conference's call for 'closer examination of the strategies of framing and contextualisation that are constitutive of ecological research', this paper puts the borders traditionally perceived between scientific/quantitative records and subjective, experiential, literary-poetic depictions and evocations in writing about the natural world into question, using Lefebvre as it draws on materials kept at the National Meteorological Office Library in Exeter, England that include private weather diaries and weather-related correspondence of a range of social actors such as farmers, landowners and local gentry contemporary to White. Such attention to generic cross-fertilisation offers an ecological research model that can recover an expanded archive of our histories of living with environmental change in intimate, everyday familiarity. Challenging the terms of 'parochialism', this paper uses archives of local record keeping in late eighteenth-century England to draw out the logic and models by which communities develop an 'ecological mindfulness' that, in fact, connects them to larger social processes and to our own moment of ecological crisis.

FRAMING FOREST

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In Finnish, the word *metsä* (= forest) has not only meant a place with trees or animals; it has also meant a place, an area or space outside of the border. A cow or a man could get lost in the forest in such a way that the seekers cannot even see this lost animal right in front of them. This phenomenon (metsänkätkö, metsänpeitto = forest covers, forest hides) has its reflections today as well. If something goes wrong, you can say that "everything goes into the woods" (= *kaikki menee nyt metsään*).

In my paper I will bring out different kinds of invisible and visible frames of the forest. In folk traditions there are many different ways of seeing the forest, depending on the roles you had for it. For example, traditionally hunting was a men's job, yet there are many examples of a gendered forest that can be seen up to the present time. And when the forest industry began to grow in the 1800's, it was in opposition to the ways people had used the forest. Forestry examined, in turn, the forest from the side of industrial use, but ethnology, for example, did not see the growth of industry. There are many other examples of how different branches of science have had too fixed frames for seeing what is happening outside. Here I will analyse some examples of cultural sustainability of the forest.

Earlier research of forest in forestry has focused on economy and ecology, but slowly the social and now cultural approaches have become important as well. However, the cultural side of the forest

has been perceived as indefinite and insignificant. In my paper I will stress the importance of seeing these narrow conceptions, for example in connection with cultural sustainability or generally in understanding the meaning of the forest.

"THRIVING ON THE ROAD TO RUIN": AGENCY AND NECROREGIONS IN LOUISIANA'S NATURE WRITING

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This paper will argue that some of the most intriguing exemplars of so-called new nature writing, or what this paper labels Anthropocene nature writing, have been inspired by the vast and rich wetlands on Louisiana's Gulf coast. In this vibrant place, where the bottom is literally dropping out from under their feet, nature writers chronicle a complex dance of agencies, human and non-human, as they try to decipher the interconnecting network of causes that are sending one of America's greatest ecosystems and cultural treasures the way of Atlantis. Rather than venture a traditional escape into the wild, Louisiana's nature writing introduces its readers to a region where multiple human and non-human worlds orbit one another, often hardly interacting, but intra-acting in ways science has barely begun to discern, many of which are speeding along one of America's greatest ongoing environmental disasters.

My paper focuses on the last decade of Louisiana nature writing, and takes its structural cue from the metamorphoses it has recently undergone within the framework of real world crises. It will show how the genre changes, expands and adapts as the region suffers through the hammer blows of environmental disaster, from Katrina raising the specter of global warming, to the trans-corporeal neurosis following on the heels of the Deepwater Horizon oil spill. Writing with great urgency in an ecosystem in "metabolic meltdown", where everything

is on the move, and all boundaries are permeable, ceaselessly shifting, forming and reforming, Louisiana's nature writing strives to adapt and remain an act of hope and defiance in what could well be an emerging necroregion.

POSTHUMAN NARRATIVE NATURECULTURES: METAMORPHOSES OF POLITICS OF LIFE AND ZOE

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The aim of this paper is to explore not only the textuality of material bodies with regard to new vitalism, but also political and ethical implications of material ecocriticism. It is with the impact of biotechnologies, nanotechnology, natural sciences, genetic engineering, advanced cybernetics, and biomedicine that posthumanist scholars, such as Cary Wolfe, Donna Haraway, Katherine Hayles, Karen Barad, Stacy Alaimo, Rosi Braidotti, Jane Bennett, have begun to question the entrenched notion of the taxonomy of "human" in a very multifarious way that the Cartesian bifurcation of nature and culture, human and nonhuman (animals, machines, objects), and animate and inanimate has been deconstructed and reconfigured in various strains of posthumanism. This sort of deconstruction might open new pathways for ruminating upon newly emergent fields, such as material ecocriticism. Drawing principally on theories of posthumanism, this paper raises some important questions about how this strain of ecocriticism might shape and reconfigure cultural practices, everyday lives, and global understanding of the world. It can be said that material agencies' impact on human and nonhuman corporealities is of great importance to understand social and cultural discourses inscribed on inanimate objects. Indeed, this poses another question in relation to representationalism: How to understand the varied stories of nonhuman ecologies without using representational practices?

Suggesting that all material bodies as readable texts are counted as "vital entities" such as viruses, bacteria, several microorganisms, intra-acting within the phenomena, this thought might bring politics of objects into question. More to the point, every material body is altered, commodified, medicalized, objectified and aestheticised by means of global capitalism and biopolitics. The nonhuman-machine symbiosis, such as "talibanator," might be conceived as a threat to human and nonhuman life on earth. That is to say, capital consumerism and capitalism always reinforce a serial commodification of objects, animals and nonhuman ones; therefore, it is important to explore the underlying sides of biopolitics and its interrelationship with capitalism in relation to material ecocriticism and posthumanism. In *Vibrant Matter: A Political Ecology of Things*, Bennett asks: "How would political responses to public problems change were we to take seriously the vitality of (nonhuman) bodies?" (viii).

WHAT NATURE?: CHALLENGING THE FRAMES OF NATURE IN WILLIAM GOLDING'S *THE LORD OF THE FLIES*

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William Golding's novel *The Lord of the Flies* raises important questions with regards to nature in the word's each and every denotation. Nature has long been associated with the unrefined, the uncivilized, and the primitive. However, Golding re-evaluates this long-established dichotomy and presents it in such a way that one wonders whether such traditional attributes of nature are still tenable. By placing the novel at the outset in an Edenic setting which squarely corresponds to the prelapsarian innocence of the group of boys in the narrative, Golding draws parallelism between the purity of the preadolescent boys and that of the beautiful island where the whole action takes place. As the natural setting works on a macrocosmic level as a frame that incorporates human nature and, later, the deterioration thereof, every single action man takes immediately finds its reflection and effect on nature. The first incident that leads the boys to get stuck on the island is the plane crash which the narrator tells us leaves a "scar" on the landscape, profoundly changing the surface of the island. In this respect, the relationship between nature and human beings is immensely based on give-and-take. As the narrative progresses, the bigger frame of nature is deeply shaped and changed in parallel with the atrocities Jack Merridew and his crew carry out. The Edenic landscape at the outset grows into something pale and intimidating as the boys become wilder and more savage. Hence, I argue that hu-

mans' whimsical appropriation of nature as primitive or evil is both a consequence of the projection of their own human nature onto nature in general and at the same time a subterfuge to conceal their innermost primitivism.

However civilized as they may seem, the persistent inner primitivism of humankind outweighs the much celebrated civilization they boast about. The harmonious idyllic atmosphere of the island is razed to the ground by the blaze of the so-called "well-educated" civilized boys who are in turn saved by the British navy officers on their way to probably bring destruction elsewhere. Therefore, the deterioration and degeneration of human nature bring along the destruction of both nature and human beings. In this paper, I will argue that Golding challenges the traditional ways of framing and associating nature with savagery by introducing the extremities of human nature as well as the distances human nature can go to empower itself. Moreover, Golding pits the alleged "savage" nature, which the boys try to tame and subdue, against the human nature which by and by reveals itself to be the real savage and evil and which will not abstain from carrying out any sort of monstrous and brutal acts, wreaking havoc on the surrounding external nature. This, I contend, demonstrates that our conventional ways of framing nature are in fact our projections of our own human nature onto nature.

UNLOCALISED NATURE: FRAMING AND SPOILING NATURE AND LOCALITY

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Nature has been exploited by human beings throughout history for a number of reasons, which are direct results of anthropocentric thinking. Denying the intrinsic value and co-existence of nature with human life, and imposing the "so-called" separateness of society from nature through discourses, human beings, who were thought to be ecophobic through certain ideologies imposing the "superiority" of their own species, have ignored the material reality of the universe. As a result of this dualism supported by the philosophy of body-mind separation, nature has been used, raped and butchered in the service of humankind. The Scottish playwright John McGrath, in his play *The Cheviot, the Stag, and the Black Black Oil* (1973), draws attention to the destruction of nature and the Scottish lands within three different historical periods. McGrath demonstrates how human psyche works with the following historical events: the Highland Clearances, the economic change in accordance with the eco-tourism of the stag, and the contemporary oil rigs that threaten the natural/cultural environment. Apart from destroying nature, these environmental problems also shatter the understanding of "local" for the Scottish. Although this particular play portrays three different historical periods tied to each other with cause-effect relationship in terms of showing how far nature is destroyed through anthropocentric practices, the British playwright Judy Upton, in her play *The Shorewatchers' House* (1995),

portrays characters who fear the outside "wild" nature because of the environmental hazards through the nuclear power plant near the lake. They are entrapped in their interior space, their house, in order to protect themselves from being exposed to the environmental dangers, which can be linked to ecophobia, as well. Elaborating on ecophobic representations, Upton points to the disappointment of the characters since the government allows such environmentally dangerous places to stay open only for capitalist reasons, by erasing the local sense of that physical environment. The aim of this paper is, thus, to demonstrate the lack of locality in relation to the environmental problems resulting from the human interventions of framing nature, and to confirm the existence of intra-action in the universe, and that of ecophobia in human psyche.