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Four Problems, Four Directions For Environmental Humanities:

Toward A Critical Posthumanities For the Anthropocene

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Taking into account intersecting trends in political, academic, and popular engagements with environmental issues, this paper concerns the development of environmental humanities as an academic field of inquiry, specifically in this new era many are calling the Anthropocene. After a brief outline of the environmental humanities as a field, we delimit four problems that currently frame our relation to the environment, namely: alienation and intangibility; the post-political situation; negative framing of environmental change; and compartmentalization of “the environment” from other spheres of concern. Addressing these problems, we argue, is not possible *without* environmental humanities. Given that this field is not entirely new, our second objective is to propose specific shifts in the environmental humanities that could address the aforementioned problems. These include attention to environmental imaginaries; rethinking the “green” field; enhanced transdisciplinarity and postdisciplinarity; and increasing “citizen humanities” efforts.

INTRODUCTION

Thinking with the Environment in the Anthropocene

A consensus is building that our planet has entered the so-called age of Anthropocene—a post-Holocene epoch defined by the significant impact of humans on geological, biotic and climatic planetary processes (Crutzen and Stoermer, 2000). On the one hand, there is good reason to exercise caution in relation to this concept of the “Age of Man.” At a time when immoderate anthropogenic impact poses a serious threat to ecological integrity and balance (e.g. Westra, 2010; Intergovernmental Panel on Climate Change [IPCC] 2013), calling an epoch after ourselves does not necessarily demonstrate the humility we may need to espouse. Moreover, discourses of Anthropocene risk overwriting important differences among human populations and covering over uneven power distributions both in terms of responsibility for and

vulnerability in the face of environmental problems (see, e.g. Crist 2013; Cuomo 2011; Åsberg, Hayes and Neimanis, [forthcoming 2015 UPDATE IF POSSIBLE](#)). On the other hand, despite these important concerns, the growing popularity of the term “the Anthropocene” nonetheless signals an important shift in how humans are coming to understand our relation to the environment. In the context of the Anthropocene, we no longer have the luxury of imagining humanness and culture as distinctly separate from nature, matter, and worldliness. The world is everything that is the case, Wittgenstein said, and nowadays we are more obviously all in it together. This context suggests the urgent need for critical reflection on the state of our environment, on human subjectivity and actions, but most importantly, *on their inextricable entanglement and how to then research this*. What are the stakes (promises, risks) involved in narrating and managing, living and theorizing in the human/environmental interface? What matters, practices, identities, ethics, aesthetics and imaginaries (including the notion of the Anthropocene itself) are emerging and interacting to shape competing worldviews on this interface—and to the benefit or detriment of whom, or what? Such questions underline the need for modes of inquiry and theoretical frameworks that are adequate to understandings of the “environment” that are shifting both with and against the new idea of the Anthropocene.

The term “environmental humanities” is increasingly used to denote one such mode of inquiry. Interdisciplinary in nature, and plural in manifestation (Oppermann, 2011; Gersdorf and Meyer, 2006), environmental humanities respond to what Palsson et al. refer to as the “need to re-frame global environmental change issues fundamentally as social and human challenges, rather than just environmental issues” (2011, 5). Environmental humanities are a means by which fundamental concerns within the humanities—such as, “meaning, value, responsibility and purpose” (Rose et al. 2012, 1)—can be brought to bear on questions of the environment

through the deployment of humanities modes of enquiry. Our overarching aim in this paper is to consider the objectives and imperatives of the environmental humanities particularly for “our” time—a time that is, for certain, a thick (Neimanis and Walker, 2013), queer (Halberstam 2005, Freeman 2010), non-linear (de Landa 2000, Prigogine & Stengers 1984), multispecies and ethical (Rose 2012) time that can hardly be said to have a universal subject or one Grand Narrative to accompany it. Yet, this uneven and multivalent time is nonetheless one in which we must grapple with the causes and implications of a growing global discourse of the Anthropocene, for better or worse. Our task is thus the tricky one of acknowledging the differences and diffractions in worldviews, histories, subjectivities, relations and practices that various communities (both human and non-human) engage in, with respect to their environment, while also cultivating an environmental humanities that is well-placed to research and analyze these differences, and remain vigilant against the risk of epistemological monoculture (Code 2006). In other words, if we are to champion the need for environmental humanities today, it must be a version of this field that self-reflexively acknowledges *and even nurtures* its own contradictions, variances, and necessary open-endedness.

To move in this direction, after a brief outline of the environmental humanities as a field, we provide a diagnosis of why the environmental humanities are particularly necessary—if our goal as scholars, policy-makers, artists, and planetary citizens is learning to live well with each other, and with the environment, in these “Anthropocenic” times. Taking into account intersecting trends in political, academic, and popular engagements with environmental issues, we delimit four problems that currently frame our relations to the environment. These include: the problem of alienation and intangibility; the post-political situation; the negative framing of environmental change; and compartmentalization of “the environment” from other spheres of

concern—both in practical and ontological terms. Addressing these problems, we argue, is not possible *without* environmental humanities. At the same time, work being taken up under the environmental humanities banner is not exactly *new*. Our second key objective is thus to propose specific shifts and certain amplifications in the ways that environmental humanities are envisioned and taken up, that would be important to address the four problems we have delineated. Rose et al. have suggested that an adequate response to current environmental dilemmas demands the articulation of a reimagined or “‘thicker’ notion of humanity” (Rose et al. 2012, 1). We agree, but furthermore aver that we also need a thicker notion of the *humanities* (Åsberg 2014). In other words, environmental humanities must not only reimagine the relation between humans (culture) and the environment (nature); it must also engage in concerted self-reflexivity in a reimagination of the humanities as a delimited arm of scholarly inquiry. Four directions in which we encourage the environmental humanities to continue building and amplifying thus include attention to diverse environmental imaginaries; rethinking the “green” field in terms of naturecultures and feminist posthuman ethics of entanglements; developing environmental humanities in a specifically transdisciplinary and postdisciplinarity vein; and finally, increasing efforts in developing a “citizen humanities.”

In short, the stakes here importantly concern our ability to live well with our planetary others in the context of the so-called Anthropocene, but they also—perhaps more modestly, but not insignificantly—concern how we fundamentally organize and advance our research and scholarly endeavours.

I. The Environmental Humanities: A Tradition and a Transition

The environmental humanities is a term that names the multifaceted ways in which scholars in the humanities posit environmental challenges as inextricable from social, cultural and human factors. Because (like many such naming exercises) the term gathers an already emergent tradition that arises from many different scholarly histories and genealogies, it is impossible to offer an exclusionary definition of what exactly counts as scholarship in this field. Nonetheless, there are certain commonly accepted features of its emergence. Most basically, environmental humanities work has arisen from scholarship that has sought to address questions and issues related to non-human “nature” outside of, as a complement to and/or in contradistinction to the environmental sciences. Much of this work has entailed bringing a heightened “conceptual sensitivity” (Rose et al 2012, 2) to environmental problem-solving, with a particular focus on notions of anthropocentrism and human ontological exceptionalism.

Discipline-oriented work has been invaluable for laying many foundations within environmental humanities. Here, prominent scholars in Europe and the North Americas emerge from many disciplines. For example, in history, we find key figures such as Donald Worster and William Cronon; in literature, Laurence Buell and Catriona Sandilands are good examples. In Sweden, where environmental research emerges from the tradition of Svante Arrhenius of the 1980s, we find key scholars in the history of ideas such as Jonas Anshelm, Eva Friman, Christer Nordlund, Johan Hedrén and Sverker Sörlin. Philosophy has been a particularly fertile ground for environmental humanities, with scholars such as J. Baird Callicott, Val Plumwood, Tim Morton, and Karen Warren. Scholars from anthropology include, for example, Tim Ingold, Deborah Bird Rose, Anna Tsing and Veronica Strang, while human geography scholars include David Harvey, Dennis Cosgrove, Sarah Whatmore, and Erik Swyngedouw. At the same time, traditional disciplinary boundaries have a hard time neatly containing the work of these and other

scholars, and transdisciplinary work has been pivotal in the emergence of environmental humanities. Feminist and human animal scholars, as well as science and literature studies or eco-cultural studies scholars form interdisciplinary humanities sub-disciplines that now have long been investigating nature and environment in relation to human culture. Among them we find the generous contributions of Donna Haraway, Rosi Braidotti, Stacy Alaimo, and Myra Hird.¹

Such an embarrassment of riches within and between humanities and social science disciplines should straight away signal that “humanities” in the strict sense has been something of a misnomer of this area of inquiry from the outset; those areas of the social sciences interested in values, behaviours, meaning, and ideologies have formed an integral dimension of this work, while (as we explore further below) creative work *as research* expands this transdisciplinary territory further still. At its most basic, environmental humanities work has always challenged the idea that nature or the environment simply “is.” Environmental humanities suggest rather (employing many different conceptual frames and espousing a large variety of theoretical commitments) that human ideas, meanings and values are connected in some important way to the shape that the “environment out there” assumes. Questions traditionally belonging to natural sciences and engineering domains are thus equally questions for the humanities. In the words of Libby Robin, while

... ‘the environment’ has been defined by biophysical indicators and studied through evidence-based ‘environmental sciences’ (a term that dates back just 50 years), environmental economics, the moral, political and ethical dimensions of environmental degradation were long neglected as ‘outside the expertise’ of the dominant discourse. Attitudes and values are not easily measured, nor do they readily yield data that can be incorporated into modeling of future scenarios.

(Robin, quoted in MISTRA 2013, 6) PLEASE ENTER THIS IN REFS UNDER
ROBIN FOLLOWING CHICAGO STYLE

For this reason, it is crucial to incorporate humanistic modes of inquiry into environmental problem-solving. This is what one background paper to the field calls “a new configuration of knowledge” (Robin 2013).

On some accounts, this kind of scholarly endeavor is a several decades old, with its institutionalization (through infrastructural support) a much more recent thing. Moreover, the tradition of environmental humanities, narrated in this particular way, certainly leaves many things out, particularly as it privileges the most entrenched traditions of within the Western academe. The story of the emergence of environmental humanities could be told in many alternative ways. It could anachronistically collect many of the different (and predominantly peripheral or non-Western) cosmologies, philosophies, and histories that extend across millennia to tell the stories of human implication with non-human worlds. It could also alternatively highlight contemporary indigenous philosophies that emphasize a more quotidian *and* spiritual connection between humans and nature, or contemporary ethics. Additionally, anti-racist, feminist and anti-colonial theories and ethical frameworks have long encouraged a view of nature as a human and social issue, but have rarely enjoyed a privileged place within humanities scholarly institutions. And, of course, some of these alter-genealogies are overlapping (see, for example, the work in feminist science studies work of post-colonial Sami-scholar May-Britt Öhman (2012)). Indeed, there are many different ways in which to narrate the emergence of environmental humanities and account for their “roots” and “routes.” Even as we attend to some of these gaps below, we do not propose to resolve these debates here. Rather, along with feminist and interdisciplinary humanities scholars such as Claire Hemmings (2011), Colebrook (2009), van der Tuin and Dolphijn (2012), we acknowledge that linear narratives of the ‘emergence of fields’ are always non-innocent; most fields are probably best understood as

emerging transversally (van der Tuin and Dolphijn, 2012), in a backwards and forwards movement that gathers possible pasts and potential futures in an ever shifting story of the present. We do propose however, regardless of how the genealogy of environmental humanities is relayed, that important disciplinary oriented-work in areas such as history, history of ideas, literature and philosophy is still vital and necessary—but that environmental humanities *today* needs to be at the vanguard of new configurations of scholarly inquiry, too. Here, we agree with other scholars in this field that environmental humanities need a transition, and not only a tradition (e.g. [MISTRA 2013 IS THIS A ROBIN REF?](#), Rose et al 2012). The need for such a transition is conditioned by the particular problems we currently face in terms of addressing issues of environmental urgency. An elaboration of these problems is what we turn to in the next section.

II. Four Problems

In a time that includes both a growing popularity of the idea of the Anthropocene (even as we should remain critical of this term), and shifts in how knowledge is produced and organized within the academy and beyond, the efficacy of environmental humanities will depend on their ability to address contemporary problems and gaps created or left by other modes and configurations of knowledge production. Below, we identify four key problems that the environmental humanities are particularly well-suited to address.

(1)The Problem of Alienation and Intangibility:

One of the stumbling blocks many scholars and citizens alike face in thinking through the environment is the issue of scale. All bodies of life have their own time, spatial extension, and thus temporality, and humans, particularly those embedded in Western cosmologies, organize

their dominant imaginaries, practices, and politics around a human-scaled existence. As such, humans can find it difficult to relate to environmental issues that are predominantly sensible at other scales—the long duration of climate change, the extended time lags between causes and observable effects of toxification processes, the microscopic size of plastic particulate pollution in water bodies, or the invisibility of environmental concerns such as the low-level but ubiquitous toxics that cause Multiple Chemical Sensitivity (MCS) or Environmental Illness (EI), or the long hauls travelled by acid rain to affect territories vastly distant to its production—these are just several examples. This intangibility—i.e. the inability to literally grasp these phenomena and effects--leads to alienation, whereby human stakeholders find it difficult to feel invested in environmental issues (Duxbury, 2010, Jasanoff, 2010, Slocum, 2004). This is particularly the case in places like Sweden and elsewhere in the global temperate North where upper and middle-class publics may be relatively more protected from the negative consequences of environmental degradation and climate change (for the time being). Despite, or perhaps in part thanks to the simultaneous popularity of green consumerism, reasonably effective waste management (at least from an aesthetic point of view), and eco-branding, we seem to regard ourselves as separated from, not part of, the imagined nature we seek to rescue. As “freak weather,” flooding and droughts become an increasingly common occurrence in the temperate North/the West, this may change, but techno-fixes and shifting baseline syndrome may keep environmental concerns sequestered as “someone else’s problem” (if not mere entertainment in apocalyptic climate movies such as *After Earth*) for some time to come. Addressing this intangibility will require an understanding of the humans as intimately *part of* the environment, as through-and-through embedded in it, as well a more capacious ability to imagine our implication in pasts, futures and worlds at scales different to our own.

Alienation and intangibility also disengage publics from democratic decision-making processes in the political sphere (which became apparent in the failure of the Agenda 21 projects during the nineties), as well as from citizen engagement and attitude and behavior change in the social and private spheres. As Palsson et al. note, “the tackling of the global change challenges must also be of wide societal and individual concern. For this to happen, a deeper and more open dialogue and integrated cooperation between the research community, policy-makers, society and ultimately private individuals are required” (Palsson et al. 2011, 3). In sum, a key task of next-generation environmental humanities will be to reconnect not only human bodies to environmental phenomena, but also to the discursive arenas of environmental politics. This leads us directly into the second problem.

(2) The Problem of a Dominant Technocratic Approach in a Post-Political situation:

It has been often suggested or even taken for granted that many key arguments in the critique of traditional political ideologies and contemporary socioeconomic organization have merged into something that could be adequately called the “green” ideology (Bradley and Hedrén 2014). While this might be a relevant description as far as party politics goes, the field of environmentally-related thought is better understood as a diverse pattern of controversies. Dimensions of conflict—such as those related to growth, the appropriate level of consumption, ethical and economic relations between the global South and the global North, the responsibility for non-humans, the responsibility for future generations, and strategies for climate change mitigation—are strong and complex. But despite the contested character of environmental problems, there persists a strong tendency in politics in many countries to handle green issues in a strikingly consensual manner, or at least under the guise of a neutralized political climate (Hajer 1995, Harvey 1996, Dryzek 1997, Forsberg 2002, Hedrén 1994, Rydin 2003,

Swyngedouw 2007). The tendency of de-politicization has been analyzed in a body of research on *post-politics*—a situation that “reduces the political terrain to the sphere of consensual governing and policy-making, centered on a technical, managerial and consensual administration (policing)” (Swyngedouw 2011, 266).

In such a context, the official politics in many countries in the global North exclude anything genuinely *political*, i.e., issues related to competing agendas and goals, the appropriateness of fundamental principles and conflicting interests, values or prospects for the future. In the discourses of sustainable development and environmental politics, we usually find descriptions of the situation and suggested actions in which the comprehensive truly political concerns are made invisible. The tasks related to environmental quality and values, and the distribution of risks, damages and resources, are made to appear as technical or managerial issues to be handled by experts and administrators. In short, environmental issues become framed as merely a technocratic problem to be effectively managed. This “post-political condition” (Mouffe 2005) can also be interpreted in terms of the triumph of ecological modernization. Here, environmental problems are transformed into an engine of innovation and growth, dethroning the state to the position of service supporter of green companies (Hajer, 1995; Spaargaren and Mol, 1992). Ironically, the deeply political green problematique becomes neutralized and converted into a stimulus for the utopia of neoliberalism and freewheeling capitalism that many scholars regard as the origin of current degradation of the environment (Bradley and Hedrén 2014). The effects of the post-political situation are also importantly gendered and restrict possibilities for feminist ecological citizenship, as theorized by McGregor (2013).

These observations connect to the fact that advertising and media in general strongly invoke the correctness of what are considered “green” or “ecological” lifestyles. The post-

political framing continuously merges with the framing of this new kind of consumerism in which green issues are commodified. The focus in this discourse is on the harmony of the private (predicated on upper-middle class values), giving rise to aestheticization instead of critical analysis (Hedrén, 2009) and the concretization of the commodification of nature or green issues (Harvey 1996; Jameson 2010). Meanwhile, questions of uneven distribution of resources, both globally and at the local level (across racialized, gender, and class lines) are rarely represented. This lack of attention is exacerbated by transnational governing bodies (e.g. United Nations Commission on Sustainable Development) that appeal very strongly to management of the environment, instead of politics. Again, it is, as Phil Macnaghten and John Urry put it, “avowedly *apolitical*” (Macnaghten and Urry 1998).

It is precisely this apolitical or post-political milieu that environmental humanities today must contend with. Questions of value, meaning, difference, and competing world-views must be *re-enlivened* as crucial parts of the conversations. We need a politics of environmental difference. Upon assessing the post-political context, MacGregor provocatively asks, “What hope is there for counter-hegemonic political theories and social movements in times like these?” (2013). We address this link between political (or decidedly apolitical) framings of environmental issues and lack of positive stimulus to act, in our third problem.

3) The Problem of Negative Framing:

“Climate Change: Arctic Sea Ice Melting Twice as Fast as Models Predict,” “Climate change key to megafauna deaths;” “Climate change, weed killers treacherous for Texas monarchs;” “Climate change is 'great demon of our day';” “Climate change threatens the future of Winter Olympics.” CITE EACH OF THESE & ADD TO REFS This is a small sample of local and global headlines including the term “climate change” from *just the past month* WHAT

MONTH? As with any discourse, communication is dependent not only on the “facts” but on connotations, associations, imagery and tone. As this sample of climate change communication highlights, in the context of the Anthropocene, a negative tone of urgency is taking considerable hold. Issues such as water pollution, habitat loss, and rising global temperatures are certainly troubling. At the same time, consistently negative, even apocalyptic, framing may not lead to effective citizen participation and may stifle opportunities for innovative thinking around environmental challenges. Uncertainty about the future may not be avoidable, but how we frame such uncertainty can have significant impact. For example, as recent studies by Morton et al. demonstrate, “higher uncertainty combined with a negative frame (highlighting possible losses) decreased individual intentions to behave environmentally. However when higher uncertainty was combined with a positive frame (highlighting the possibility of losses not materializing) this produced stronger intentions to act” (Morton et al. 2011, 103). Other researchers point out that apocalyptic narratives have some awareness-raising value (e.g. Yusoff and Gabrys 2011), but we aver that they must be balanced with alternative narratives that can inspire more creative problem solving and a strong sense of participation and involvement.

It is worth pointing out that apocalyptic or doomsday scenarios are also, perhaps somewhat more perniciously, related to prior discourses within sociobiology that worked to pose “no future” scenarios for already vulnerable populations (usually racialized and colonized people, and of low socio-economic means). As Yasmin Gunaratnam and Nigel Clark for example highlight, drawing on the work of Paul Gilroy, white supremacy has often functioned through a denial of the right of black populations to the future or to be future-oriented. These authors relate this to climate change in terms of a “moral climatology” that must be fought against through a close intertwining of questions of racial justice with climate justice ones (Gunaratnam

and Clark 2012). This example could easily be extrapolated to all sorts of environmental “crises” that position colonized, marginalized or vulnerable groups at the brink of disaster and extinction—not only are they materially more vulnerable to many forms of ecological generation, but their agency and future imaginaries are also placed under erasure discursively. Moreover, we could link this problem directly to the lack of investment that many elite communities in the temperate global North and West may feel in regards to climate change—a complacency that is more easily enacted when one still has a discursive link the future.

The problem of negative framing is moreover related to “an important tension” emerging within the environmental humanities between a humanities approach that is focused on critique of dominant narratives, and “the dire need for all peoples to be constructively involved in helping to shape better possibilities in these dark times” (Rose et al 2012, 3). In other words, unproductive negativity concerns not only an attitude toward the environment as in a state of always urgent crisis, but also toward negatively-focused scholarship in this area. In both cases, if negative discourse overshadows positive approaches, the above-mentioned problem of alienation will be further exacerbated. Next-generation environmental humanities need to develop discourses that are also, as Rose et al. point out, constructive and hopeful (2012).

4) The Problem of Compartmentalization:

Despite the important awareness-raising by activists and theorists concerned with environmental justice, racism and poverty, environmental questions are still by-and-large too compartmentalized as narrowly *environmental*. This is certainly well-noted in the case of environmental policies and governance. As the World Commission on Environment and Development (WCED) noted in 1987, “the integrated and interdependent nature of the new [environmental] challenges and issues contrasts sharply with the nature of institutions today”

(310)—and this remains largely true today. As Vogler and Jordan more recently point out, two key challenges remain an effective implementation of environmental policy integration (EPI)—ie. horizontal coordination between different sectors, and in particular, between areas of environment and economic development—as well as better vertical integration between various levels of governance (Vogler and Jordan 2003, 142). This compartmentalization is also a scholarly problem of “silos” or disciplines—the address of which is a key motivating factor for environmental humanities in the first place. While the interlocking nature of social injustice (including questions of geopolitics, education, labor, economics, health, culture) with environmental degradation has been a focus of environmental justice and ecofeminist activism for several decades, the academe is still insufficiently attentive to these connections (on the Canadian context in particular, see Gosine and Teelucksingh 2008). Despite significant integration of environmental issues into a range of disciplinary orientations, there is still much to be done in terms of ensuring greater transversal movement across various disciplines in the investigation of specific environmental themes or questions—and greater institutional recognition of this necessary mode of scholarly inquiry.

The obvious danger of compartmentalization is that the links between economy (growth), culture (consumerism) and environmental degradation and resource depletion will not be seriously explored. Another less obvious, but equally significant danger is that compartmentalization might *cover over human difference* (on the basis of gender, sexuality, race and ethnicity, age, bodily ability, geographical location, social and economic status) in the face of environmental challenges. In other words, compartmentalization of environmental questions risks failing to address the integrated nature of environmental injustice, across questions of racism and coloniality, gender and sexual difference, poverty, social exclusion and other ethical

domains. Such danger is particularly potent in the context of the rising discourse of the Anthropocene that discourages a critical view of precisely how, where, and by whom human effects on climate, ecosystems and biodiversity are specifically caused (see Doyle and MacGregor 2014; Cuomo 2011; Crist 2013). As with the problem of the post-political milieu, compartmentalization of environmental change (i.e. geophysical, biological or meteorological manifestations) from questions of social justice strengthen an imaginary that “casts Nature as a threat to be endured” and managed (Macgregor 2013), standing against an amorphous human constituency. In this sense, compartmentalization is not only sectoral or disciplinary, but also ontological, referring to the entrenched bifurcation of “nature” from “culture.” Drawing attention to the (often invisibilized) differences between bodies in the Anthropocene *as well as* their entangled nature must be a key priority for environmental humanities.

III. Four Directions

We aver that effectively and creatively addressing these four problems is not possible without post-disciplinary environmental humanities—that is, without modes of scholarly inquiry that can move across and between disciplines and publics, and that can engage the values-oriented, imaginative and affective dimensions of environmental issues rather than only the scientifically “factual” ones. Moreover, as we suggest above, to do so in the particular context of a rising Anthropocene worldview will require certain shifts and amplifications in the ways that environmental humanities are already being taken up. Below, we propose four directions in which the environmental humanities could move to take up these challenges.

(1) Attention to diverse environmental imaginaries:

There is a strong consensus that environmental science alone is not sufficient to engage publics and initiate change on environmental issues (Steiner and Nauser 1993, Lövbrand and Linnér 2013), and environmental humanities press the point that environmental problems are not just technical problems requiring efficient solution. Rather, how we understand this phenomenon we call “nature,” and its corollary—“the environment” (see for example Worster 1977, Plumwood 1993, Sandilands 1999, among others) has important implications for laws, policies and individual actions in the context of a changing climate, biodiversity loss, resource extraction, water crises, pollution and toxicity. This means that any policy or action aimed at ameliorating environmental problems must take into account human desire, motivation, and values; a deep understanding of environment cannot be divorced from human imagination, culture, and institutional and social practices. In other words, imagination is salient here, and the proclaimed advent of the Anthropocene offers a vital moment for contemplation and critique of how such understandings and imaginings might be shifting.

Occasionally discovered in the social science literature, references to “imagination” and “the social imaginary” appear often unexplained while it has been a crucial concern in the areas of cultural studies informed by feminist theories, Foucault and poststructuralist work on subjectivity, and cultural forms of psychoanalysis (Dawson 1994). For example, to re-work the social imaginary in which a subject finds, de/re/values and defines herself in relation to others and to collective ideals has (parallel to cultural studies) been on the feminist scholarly menu for decades, from consciousness-raising groups to poststructuralist theorizing—and it is from this field that we draw our main understandings of this concept. In particular, imagination has been a staple in feminist critiques of how masculinity gets to masquerade as humanity. It is implied in Nancy Hartsock’s concept of “abstract masculinity” (Hartsock 1983), explicit in Drucilla

Cornell's development of a legal theory of bodily integrity and a universalist ethic that does not devalue the feminine (Cornell 1995), and in Moira Gatens' collection *Imaginary Bodies* from 1996. For Gatens, as for many feminist theorists, the imaginary is understood as the explorative, yet somewhat restricted, sense-making fields wherein humans cultivate and negotiate relations with the material world, both emotionally and rationally, while also creating identities for themselves (Appadurai 1996; van Dijck 1997). Here, we end up with an understanding of "sociocultural imagination" as a cultural terrain for collective dreaming, aspiration, collaboration and negotiation, and, in the words of Athique, "endless potential for transformation" (2008, 25). In short, social and cultural imaginaries represent as pointed out by Arjun Appadurai, "an increasingly influential, organized field of social practices and a form of cultural negotiation between sites of agency, competing worldviews and globally defined fields of possibility and reality production" (1996: 5ff).

Understandings of sociocultural imaginaries have importantly influenced the conceptual development of environmental or ecological imaginaries. While this notion is in wide circulation within ecocriticism already (e.g. Heise 2008; Buell 1996), it is also gaining traction in debates of increasing relevance to environmental politics, citizenship, and related socio-institutional practice. In some literature, this term denotes how the natural environment, in its specific local and regional forms (desert, mountain, etc), influences and shapes values, discourses and practices of that locale's inhabitants or users (e.g. Davis and Burket, 2011). In a similar vein, Peet and Watts (1996) use the term to highlight the way in which the natural environment is always a key participant in the social imaginaries described above (that is, how one's physical environs shapes one's sense of social belonging and values). But they also suggest a slightly different understanding of this concept: not just (partial) environmental determinism of a social imaginary

but also the way in which that social imaginary always already includes values and attitudes towards environments. In a word, these imaginaries are also “a way of imagining nature, including those forms of social and individual practice which are ethically proper and morally right with regard to nature” (Peet and Watts 1996: 263)—and thus explicitly connected to ethical practice. Like social imaginaries, environmental imaginaries are sites of negotiation that can orient material action and interaction. Indeed, the *environmental imaginary* (Yusoff and Gabrys 2011; Åsberg, Koobak, and Johnson 2011; Åsberg and Neimanis 2015; Bradley and Hedrén 2014) very significantly impacts how we deal with environmental crisis. The rigorous consideration of these imaginaries as “worlding practices” (Strathern 1992, Haraway 2008) is one way in which environmental humanities, in the thicker sense outlined here, aim to remedy the alienation from and apoliticization, negative framing, and compartmentalization of environmental issues in the Anthropocene. Transcorporeal (Alaimo 2010), naturalcultural (Haraway 2008), more cosmopolitan (Heise 2008), deep time/deep futures (Clark and Gunaratnam 2012) imaginaries, as well as imaginaries of belonging (Gibson-Graham 2011) are just some of the ways in which next-generation environmental humanities are seeking out nodes of specific, situated connection (for better or worse) between humans and non-human natures, and to increase our felt responsiveness to environmental bodies not only locally, but in various temporal and spatial modes.

Importantly, moreover, environmental imaginaries are not (always) speculative; they are also alternatives that are lived and experienced in many ways, globally. Attention to environmental imaginaries also includes exploring them in everyday practices, and within non-Western cultures and pre, post- or non-capitalist contexts. Noteworthy here are studies of non/post-capitalist practices that currently exist (e.g. see Gibson-Graham’s “Postcapitalist

politics,” 2006) and alternative economies have grown in the wake of the 2007 global financial crisis. For example, Gibson-Graham’s inventory of ideas for an imaginary of “belonging” in the Anthropocene includes attention to various “adventures in living” at the regional level, such as employee-owned cooperatives, peer-to-peer information commons, and community-supported agriculture hubs (2011).

Examination of green utopianism is also relevant to the pursuit of alternative imaginaries. In an era of political resignation when potential controversies have been transformed into matters of lifestyle, “the utopian spirit remains more necessary than ever” (Jacoby, 1999). Gathering, analyzing and further activating the seeds of green utopianism and experimental collaborations with more-than-human natures found in a number of experimental micro-practices all over the world—not only community in citizen projects, such as explored by Gibson-Graham, but also in artistic interventions and arts-sciences collaborations, such as we suggest below—would further address the problems of negative framing and popular alientation by (re)instating an imaginary of curiosity, care and concern. While arguably, environmental humanities have always been concerned with imagination, we argue that increased attention to different and even competing worldviews is currently an important direction for exploration, that also promises to enliven political and values-oriented analysis in the green field: what imaginaries sustain what kinds of goals, values, politics, actions in this so-called Anthropocene? To the benefit of which environmental bodies, where, how and why?

(2) Rethinking the “green” field: naturecultures and feminist posthuman ethics.

While attention to imagination might awaken green critiques from a post-political slumber, the “green” field needs to be reconceptualized in ways that also address the problem of compartmentalization. Heightened attention to environmental imaginaries, discussed above, that

expand what we understand “the environment” to be, and how human bodies are differently constituted and affected as part of the environment, moves us in this direction, but more specifically, next-generation environmental humanities should explore the myriad entanglements—between human and non-humans, between sectoral and scholarly areas of concern, between pasts and futures, and between environmental bodies of all kinds—with which we must currently grapple. Hence environment, or the idea of “green,” would no longer be a “field of its own,” but rather a thread shot through all domains of life. It would respond to what Donna Haraway, after Bruno Latour, has called “naturecultures”—ontologies of living with, as and through environments, where nature cannot be separated from culture, in all of the myriad forms those two commonly bifurcated terms take up, e.g. environment vs humans; ecological crisis vs governance; matter vs meaning; flesh vs word.

Attending to these entanglements, we propose, demands specific attention to new models of ethics. Such ethics would recognize the necessity of re-imagining the relationships between humans, other animals, waters, lands, and other “Earth others” (Braidotti 2013) as a cornerstone of continuing to live well with all of these “others” on a changing planet. It would also, again, stress that differently situated humans (according to class, gender, age, geography, ethnicity, and so forth) will be affected very differently by environmental challenges. This ethics, which we term a posthuman ethics, or an ethics of the encounter, works toward cultivation of the curiosity, care and concern noted above. It approaches the issue of “living well” with both human and more-than-human others in terms of responsivity (Barad, 2007, Gibson-Graham 2011, Åsberg 2013 and 2014, Neimanis and Walker 2014) and recognizes that diversity and difference are irreducible, and not to be “managed” away. This is related to the need to adopt a cautious attitude toward the idea of Anthropocene (Crist 2013), in which Man is again placed in the center

of the world as a prime mover, in favor of an openness toward alterity and unknowability (Spivak 2004, Christian and Wong 2013, Neimanis 2014). An ethics of the encounter also encourages more sensitivity to alternative (more-than-human) time scales and possible environmental futures, such that both our bodily inheritances and our legacies are carefully considered (Clark and Gunaratnam 2012)—which is what indigenous scholar Lee Maracle refers to as “finding freedom in the context we inherit” (2005) as a way of living ethically with challenges that may not be directly of our making, but in which we are inextricably entangled. Such approaches can be creative and even speculative, but they are also grounded in the need for justice and action. Furthermore, such approaches do not discount the need for strong policy solutions; rather, they strengthen such efforts by demanding closer attention to *local particularities* and accountability for the actions of oneself and one’s community or social group.

The development of such an ethics as a fruitful direction for environmental humanities pays homage to feminist genealogies of environmental and posthuman scholarship. While feminist theory today stands as cutting-edge innovator of many areas within the humanities dealing with bodies, nature, science and technology (as evidenced in the burgeoning fields of new materialisms, posthuman ethics and new feminist science studies), it does not represent *one* position or standpoint (e.g. ecofeminism) but constitutes rather a multivalent analytical tool box. These tools, we argue, are particularly valuable for the next-generation environmental humanities **for which** we are advocating, and *even provide the conditions of possibility* for some of its lines of inquiry. For instance, the work of ecologically-oriented feminists such as Carolyn Merchant, Donna Haraway, Anna Tsing, Stacy Alaimo, Catriona Sandilands and Val Plumwood **is key** in the emergence of contemporary environmental humanities—particularly in their vanguard critiques of the nature/culture split and the connection between modern individualistic

humanism and the derogation of nature, which were taken up above in terms of environmental imaginaries. While certainly not the only area of thought to address these questions, feminist theory is also notable for foregrounding questions of justice that are particularly salient in the Anthropocene, as we have been arguing throughout this paper. The feminist concept/methodology of *intersectionality* (Crenshaw 1989, Lykke 2010), which entails an understanding of oppression through feminist, anti-racist, anti-colonial, queer and bio- or earth-centric frameworks, and as integrated and co-determining (Plumwood 2003, Gaard 2001, Neimanis 2012) is particularly salient. Here, important bridges are also built to environmental justice, regional development, and decolonizing work (e.g. de Chiro 2008, Gosine and Teelucksingh 2008, Gibson-Graham 2011, Nixon 2011, Smith 1995)—crucial considerations for the environmental humanities in the context of the Anthropocene. Similarly, long-standing feminist work on situated knowledges (Haraway 1988), as well as within some areas of feminist science and technology studies and human-animal studies, have recently culminated in a surge of interest in the feminist posthumanities (Åsberg 2008, Åsberg and Braidotti **forthcoming UPDATE IF POSSIBLE**), pave the way for an environmental humanities that foregrounds question of more-than-human ethics, particularly though their conceptually sensitive research into ontologies and epistemologies.

It is within this body of scholarship, for example, that key questions are being asked about how theories of embodiment impact our response to environmental health and injustice, such as Alaimo's recent work on environmental illness and multiple chemical sensitivity (2010). Climate change, and concern over how a worldview that separates nature and culture ill equips us for adequately dealing with its challenges, is another emerging focus of path-breaking feminist work (e.g. Colebrook 2011, Neimanis and Walker 2014). Concern over new forms of colonization in

Antarctica, with significant environmental impacts, is also a particularly salient question that is specific to the era of the Anthropocene, and is being explored through transdisciplinary feminist scholarship by theorists such as Lisa Bloom (2012) and Elena Glasberg (2011). Living well with and as “bodies of water” provides one more example of feminist scholarship that is developing useful modes of ethics that respond to specific challenges of the water resources in the Anthropocene (e.g. Neimanis 2012, 2013; Christian and Wong 2013; Hawke 2012). Not all important emerging work within the environmental humanities will be explicitly feminist. However, we argue that if next-generation environmental humanities is to effectively address problems of compartmentalization, alienation, and an unhelpful focus on technocratic management rather than values and ethics, there is much to learn from the strong track record of conceptual innovation present within feminist ecological theories and posthumanities. Not least, feminist posthumanities also provide a solid model for *trans-* and *postdisciplinary modes* of working—an issue to which we now turn in our third proposal.

(3) Transdisciplinary and Postdisciplinarity:

Assessments of the current state of environmental humanities (e.g. Rose et al. 2012, MISTRA 2013) recognize that this field should continue developing important disciplinary inquiry into environmental questions, but these reviews also highlight that in order to address the compartmentalization of urgent social, political and environmental issues both within and outside of academic realms, the environmental humanities must also develop new collaborative modes of inquiry. We argue that in order for the environmental humanities to really operationalize new modes of thinking *about* nature and culture, they need to find innovative and appropriate methods and means for exploring these questions. Similarly, if disciplinary approaches to environmental humanities are going to engage in productive cross-fertilization, their

methodologies need to experiment in new forms (and amplify existing forms) of dialogue. More than information exchange, the environmental humanities should be utilized as a transdisciplinary meeting ground and a laboratory for culturing new approaches, methods, theories and desires in relation to significant environmental matters. Models for such work are emerging. For example, the collaborative project and collection of work *Thinking with Water* (Chen, MacLeod, and Neimanis 2013), brings together multiple disciplinary and multiple perspectives—anti-colonial, feminist, animal studies, posthumanist, ecocritical, poetic; and from anthropology, communications studies, philosophy, political theory, performance studies, among others. Yet different from the anthological approach that gathers different disciplinary perspectives in one place, transdisciplinary modes of inquiry such as demonstrated in *Thinking with Water* collaborate and develop their insights through dialogue across disciplines.

Workshopping ideas, cross-disciplinary commentary, and collaboration at the editorial level can deepen analysis and develop methodological innovations. This approach to scholarship has also been called post-disciplinary (Lykke 2011), and has strong roots in feminist studies and cultural studies.

Movement towards transdisciplinary inquiry also involves increasing collaboration between academic scholars and other publics (policy-makers, artists, community activists)—which can also reflect or result in researchers taking on several of these roles as hybrid practitioners. One direction we highlight here is greater attention to collaboration with artist-practitioners as explicitly environmental humanities work. While the humanities typically include literary, visual and other practice-based arts, and while the field of ecocriticism has always researched and written *about* literary and visual arts practices that take up environmental themes, the contribution of eco-art and bio-art traditions is less often included as environmental

humanities research itself. Even as visual artists and writers are routinely invited to present their work at environmental humanities symposia and colloquia, this often takes the shape of artistic interval; we advocate recognition of collaboration as valuable at the research stage itself. The possibilities of such post-disciplinary practices have much to offer in terms of addressing affective alienation, compartmentalization of nature and culture, countering negative framing and fostering new imaginaries. Creative research incubators, arts-sciences collaborations, and other experimental methods of bringing the practices and hands-on materialities of both the sciences and art into environmental humanities present ways for a theoretical troubling of the nature/culture divide to connect to a *practical* troubling of this divide. SymbioticA (PLEASE INCLUDE THIS WEBSITE IN REFS) research lab at the University of Western Australia, established by Oron Catts and Ionat Zurr, exemplifies the sort of post-disciplinary environmental humanities practice to which we refer. For example, their *Adaptation project* (CITE & ADD TO REFS), initiated in 2009 with many works ongoing, opens important dialogue and debate about the relationship between human action and inaction, intervention, responses and responsibilities in relation to the environment. Based at Lake Clifton in Western Australia—an ecologically and culturally significant site—the project brings together cultural practitioners from various disciplines to tell multiple stories of the human/non-human interfaces embodied and embedded at this lake. It is a grounded, “situated knowledge,” that employs curiosity and experimentation to document longstanding relationship and forge new ones. SymbioticA’s founders have also been exceptionally active in training other practitioners and assisting in the establishment of or collaborating with other such centres—the Finnish Society of Bioart, the Incubator Art Lab (Windsor, Ontario) and Biofilia Lab (Aalto University, Finland) are some key examples. Similarly, the annual “Interformat” symposia at the Nida Art Colony in Nida, Lithuania (ADD

ALL THESE TO REFS), has for several years actively cultivated cross-disciplinary dialogue, creativity and research that includes humanities scholars, artists, and natural scientists. Using a format that mixes incubator methodologies (on-site and place-based research developed in intense working conditions) with symposium dialogue and sharing, issues such as water pollution, biodiversity, indicator species in relation to environmental toxicity, and climate change, are opened from new collaborative perspectives.

Another salient element of projects like these is their deliberate extension of artist/scholar communities into publics of all kinds. *Adaptation*, for example, emerges through a vibrant outreach and community program, alongside and part of the artworks themselves. At the Nida Art Colony, local scientists and naturalists complement the work of international scholars and artists. This brings us to our final spotlight for next-generation environmental humanities: an explicit cultivation of citizen humanities.

(4) Developing “citizen humanities.”

The fourth advantage that a “next generation” environmental humanities can offer is concerted attention to transdisciplinarity as not only movement across scholarly disciplines, but also movement across and between academia and other spheres of public engagement. Drawing on the emergent practice of “citizen science” or “street science” (e.g. Corburn, 2005), this extension beyond scholarly institutions is what we term “citizen humanities.” To date this term has been popular primarily in digital humanities and information infrastructure contexts, but we propose that it issues a particularly salient challenge to the environmental humanities as well.

In order to tackle the pressing problems of both negative framing and alienation, environmental humanities must develop forms of ecological literacy through research (theoretical and practical) that directly engages diverse publics both within and outside of

academic institutions so to renew their ethical experience of environmental embeddedness. Initiatives include elements of citizen science, DIY, public outreach (including arts and culture), and participatory research, supported by appropriate digital humanities tools. Such engagements stimulate consideration and cultivation of environmental imaginaries, for certain, and can also address issues of greenwashing, green aesthetics and apolitical “green lifestyles” that are proliferating in a post-political milieu. Citizen humanities, in other words, can take up the practical cultures of everyday life, and help reengage publics not only as consumers of environmental humanities research, but as its producers as well.

A salient example here is the work of *Citizen Sense* – a research project and laboratory based in London, UK, and run by Dr. Jennifer Gabrys. The aim of Citizen Sense is “to contextualize, question and expand upon the understandings and possibilities of democratized environmental action through citizen sensing practices” and is operationalized “through intensive fieldwork, study and use of sensing applications” (Citizen Sense, n.d.). One recent example of *Citizen Sense*’s work is taking place in Pennsylvania, where local residents will have the opportunity to monitor air pollution in relation to fracking infrastructure in their communities over several months using a combination of off-the-shelf and specifically designed small-scale monitoring technologies (Citizen Sense, n.d.). Earlier projects include air quality monitoring widgets in London, and using sensors to monitor the activities of various flora and fauna in the “wild.” Most interestingly, the work of Citizen Sense focuses on how different kinds of engagements by publics (for example, with environmental sensing technologies at a personal and individual level) affect one’s relation to the environment and environmental change. As the project literature phrases it, “What are the ways in which air and air quality have been sensed, monitored and made into an object of political deliberation? How do monitoring and

observational technologies perform and capture understandings of air and air quality?” (*Citizen Sense*, ”Air Walk Pamphlet”, n.d.). In short, citizen humanities of this kind is not simply about participation for the sake of enacting ”good environmental citizenship,” it is also about experimenting with and cultivating new environmental imaginaries for the Anthropocene, and for understanding that such imaginaries are negotiated, shaped and contested through entanglements of bodies, technologies, and stories of all kinds.

Conclusion

In order to attend to the modern divides of nature/culture, science/humanities, and matter/meaning that are perhaps ironically reinstated by an Anthropocene discourse, we need environmental humanities as *critical posthumanities*, not as a rejection of the methods and insights of the humanities, but as a way of enriching and thickening them through the insights and experiences of postdisciplinary inquiry. It is here that enlivened attention to environmental imaginaries as a critical complement to environmental science and management can flourish. It is also here that new theories, modes and practices of environmental ethics can be cultivated. Gender studies in the post-constructionist vein (Lykke 2010), cultural studies, human-animal studies, science and literature studies, evolutionary ecology in the critical vein, and eco-critique serve as examples here. They present groundbreaking modes of inquiry for finding integrated and innovative ways to address our most pressing social and political challenges. A critical posthumanities, thwarting the elitism of classical Arts, also requires a resolute commitment to citizen humanities that can engage broad-based publics not only as consumers of research but as participants in the making of environmental knowledges too. In bringing humanities scholarship into contact with environmental questions, the humanities themselves are put under scrutiny, and

potentially transformed. This reciprocal pressure to rethink the limits of both “the environment” and “the humanities” encapsulates the overarching challenge and promise of the environmental humanities as they are emerging today.

To respond to the challenges *both documented and produced* by the discourse of the Anthropocene, next-generation environmental humanities require critical historical understanding and context, precise scholarship on current and competing discourses and practices, and the audacity to imagine a wide variety of potential futures. Founded on a critical **resuturing RESTRUCTURING?** of the nature/culture divide within scholarship, the vision we argue for works in these directions. In short, what we envision is an environmental humanities as a critical posthumanities for these critical times.

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NOTES

¹ These lists are merely suggestive and far from exhaustive. Moreover, the politics of citation at work between established and emerging scholars raise many issues for further investigation, such as disciplinary border-crossings and Anglo-American academic language hegemonies.