Introduction to Environmentalism issue of *RiDE*

Environmentalism, performance and applications: uncertainties and emancipations

Abstract

This introductory article for a themed edition on environmentalism provides a particular context for those articles that follow, each of which engages with different aspects of environmentalism and performance in community-related settings. Responding to the proposition that there is a lacuna in the field of applied drama and environmentalism (Bottoms, 2010), we suggest that the more significant lack is that of ecocriticism. As the articles in this journal testify, there are many examples of applied theatre practice; what is required is sustained and rigorous critical engagement. It is to the gap of ecocriticism that we address this issue, signalling what we hope is the emergence of a critical field. One response to the multiple challenges of climate change is to more transparently locate the human animal *within* the environment, as one agent amongst many. Here, we seek to transparently locate the critic, intertwining the personal – ourselves, human actants – with global environmental concerns. This tactic mirrors much contemporary writing on climate change and its education, privileging personal engagement – a shift we interrogate as much as we perform. The key trope we anchor is that of uncertainty: the uncertainties that accompany stepping into a new research environment; the uncertainties arising from multiple relations (human and non-human); the uncertainties of scientific fact; the uncertainties of forecasting the future; and the uncertainties of outcomes – including those of performance practices. Having analysed a particular turn in environmental education (towards social learning) and the failure to successfully combine 'art and reality' in recent UK mainstream theatre events, such uncertainties lead to our suggestion for an 'emancipated' environmentalism. In support of this proposal, we offer up a reflection on a key weekend of performance practice that brought us to attend to the small – but not insignificant – and to consider first hand the complex relationships between environmental 'grand narratives' and personal experiential encounters. Locating ourselves within the field and mapping out some of the many conceptual challenges attached to it serves to introduce the territories which the following journal articles expand upon..

1. Beginnings
We write this in January 2012 – the beginning of a new year. But where to begin the story that tells how we provisionally ended up here? This beginning might best be presented as a heterogeneous constellation of encounters in time and space.

> … 1848: Thoreau publishes *Walden*; 1882: Ibsen writes *An Enemy of the People*; 1886: Svante Arrhennius, a Swedish chemist, publishes the first scientific paper on human-induced global warming; Sierra Club founded; 1893: RSBP founded; 1894: National Trust founded; 1951: Ten National Parks established in the UK; 1961: WWF (World Wildlife Fund) founded; 1962: Rachel Carson's *Silent Spring* is published; 1969: Friends of the Earth founded; 1971: Greenpeace founded; 1960s – 1990s: Dee's father is a forester with the Forestry Commission; 1972: first Earth Summit; 1979: first World Climate Conference; 1982: UN adopts a world charter for nature; 1988: NASA scientist, James Hansen, informs US congress that the planet is

heating up, because of human intervention (particularly use of fossil fuels); Intergovernmental Panel on Climate Change (IPCC) established by the United Nations and World Meteorological Organization; 1992: United Nations Convention on Climate Change; 1995: first Conference of Parties (CoP) held; 1993: Sally starts producing theatre in landscapes; 1996: Sally joins *RiDE* board; 1997: Kyoto Protocol adopted; 1998: Dee moves to Exeter where Wrights & Sites introduce her to the ideas and practices of 'site specific performance'; 2000: Ashden Directory launched; 2001: Dee co-organises a conference at Exeter – where she first meets Sally; 2003: Dee makes a performance about a tree and a square foot of earth underneath it; 2002-04: Sally works with 60 on an escarpment at the borders of Wales and England; 2009: Dee invited to join the editorial board of *RiDE*; 2010: Stephen Bottoms reviews Baz Kershaw's *Theatre ecology: environments and performance events* for *RiDE*; 2010: Dee and Sally circulate a Call for Papers for *RiDE* on the subject of 'Environmentalism'; 2010: Dee and Sally invited by Stephen Bottoms to join an AHRC funded network exploring environmental change and site-orientated performance; 2011: Dee and Sally volunteer to organise a weekend event for the network; 2011: Durban Platform agreement…

This mapping of beginnings, though partial, plural and imagined in its selection and its mixing of literature, policy and auto/biography, nevertheless risks plotting a causal teleology of events and outcomes. The reality, of course, is much messier. Our mapping is also human-dependent: events are attached to human bodies. Borrowing from Jane Bennett (who in turn borrows from Deleuze and Guattari, who borrow from Spinoza - knowledge as/is a series of borrowings), it might be more productive to consider the constellation an assemblage. Bennett's notion of assemblage casts a much wider net, proposing matter – human and non-human both – as vibrant; things are also 'vital players in the world'. Bennett's aim is to heighten awareness of 'the complicated web of dissonant connections between bodies' so as to enable 'wiser interventions into that ecology' (2010, 4). Matter is active even in the production of the sentences of her book which emerge from a confederate agency of macro- and microactants:

> …from "my" memories, intentions, contentions, intestinal bacteria, eyeglasses, and blood sugar, as well as from the plastic computer keyboard, the bird song from the open window, or the air or particulates in the room, to name only a few of the participants. (2010, 23)

In our sentences, here, there are two macroactants: Sally and Dee. The 'we' in the question 'how did we end up here?' is significant because this writing engages a collaborative practice: collaborating in the sharing and discussing of ideas, of planning, mapping, drafting, revising, erasing, commenting, editing. 'We' is a complex but highly productive relation; one that works towards what Noel Gough considers as 'starfish' rather than 'snake' writing. Where the snake is linear, travelling in one direction, the starfish is rhizomatic (Gough, 2009, pp 67-84). Deleuze and Guattari, exemplary co-authors, press home the sociability of ideas, their writing belonging to neither but in-between (in Deleuze and Parnet, 2007, 18): 'Neither union nor juxtaposition, but a broken line which shoots between two, proliferation, tentacles. […] (ibid., 17) In the 'between-two' are others, opening up the encounter. Drawing on Bennett, these others are diverse, so-called agency 'distributed across an ontologically heterogeneous field' (2010, 23). One result of such redistribution of agency is that as matter is reconceived as lively (active rather than passive), so the outcomes of intended human-actions should be understood as always uncertain, human mastery a fantasy. The efficacy of any actant is dependent on 'the collaboration, cooperation, or interactive interference of many bodies at once' (2010,

21). In Bennett's formulation, humans are thus only one actant in a heterogeneous, horizontal ecology that is a pluriverse. We, Dee and Sally, are only two of many vibrant materialities in a broader 'assemblage' and to realise the breadth of the 'we' is to call forth a disposition of uncertainty.

It was with an uncertain disposition then (sometimes liberating, sometimes not) – an ecology of known and unknown lively bodies and things, and an 'ontologically heterogenous field' – that we approached environment, performance, community and education nearly two years ago, preparing for this issue of the journal. In responding to Stephen Bottoms' proposition that the applied theatre sector has been 'comparatively slow to pick up the ecological baton' (2010, 121) we sought to enthusiastically engage academic debate, offer contexts and concepts and also – through editing the journal – facilitate the thinking of others in this emergent field.

Uncertainties

Shared interest in site-orientated performance practices has led us independently to research the environments of performance, environments which include relations between places, people, things, identities, histories, pasts and futures (e.g. Heddon 2008; 2009; Mackey 2007a; 2007b). The sense of *performance environment* as ecology, then, is familiar to us. However, we admit that when it comes to *environmentalism* as a subject we are very uncertain. We are not already-committed eco-warriors, deep green radicals, or environmental activists. It is our uncertainty – what we don't know, rather than what we do – that prompted our proposal for a themed edition on environmentalism.

Our initial attraction to the term – or the term's traction for us – is not just its currency and seeming urgency, but the range of contextual and often deeply contested signs that it mobilises, including climate change, adaptation and mitigation debates and strategies, human relationships to and encounters with 'nature' (narratives of conservation and stewardship, often bound to apocalyptic scenarios), and so on. Such a range is reflected in the articles in this journal. Mary Anderson's account of site work in Detroit challenges the very basis of 'conserving' and 'stewarding', for example, and several – including ourselves in this piece – engage more broadly with 'nature'. Environmentalism is, in reality and practice, not a singular disposition but a plurality and range of positions as exemplified by Greg Garrard's typology of 'eco-philosophies' (and individuals may shift between positions depending on the context):

- 'cornucopia': a free-market economic position, where the predicted scarcity of natural resources will be mitigated by the resourcefulness inherent to the capitalist system; the 'problem' of resource will be solved by entrepreneurs'.
- 'environmentalism': mainstream environmental position which registers concern about the environment, but which also embraces idea of scientific progress and improved standard of living.
- 'deep ecology': a radical form of nature-centred environmentalism
- 'eco-feminism': where deep ecology resists an anthropocentric binary of human/nature.
- 'social ecology': presuming that changes to the social structure will result in changes to relations to production and consumption, social ecologists challenge power relations and hierarchies at all levels, seeking to formulate new ways of sustainable living and participatory democracy. (Garrard, 2004, 16-30)

Whilst environmentalism is not synonymous with climate change, in the journey – and the environment -- of our own research, matters of climate change became central.

That 'climate change' is firmly part of twenty-first century discourse is evident in the sheer volume of information circulating, much of it widely available on the internet, from information packs for teachers, to fact sheets produced by meteorological offices, to key points summarised by national and international services. The UK's BBC, for example (last updated in 2009) informs us that:

- Global temperatures have risen by around 0.6C over the past 300 years
- The decade of 1998-2007 is the warmest on record, according to data sources obtained by the World Meteorological Organization
- The global mean temperature for 2008 was 14.3C, making it the tenth warmest year on a record that dates back to 1850
- The UK's top 10 warmest years on record (in order) are 2006, 2007, 2003, 2004, 2002, 2005, 1990, 1997, 1949 and 1999
- Global average sea level rose at an average rate of 1.8mm per year over 1961 to 2003. The rate was faster over 1993 to 2003, about 3.1mm per year
- Mountain glaciers in non polar regions have retreated significantly during the 20th Century
- There is evidence of more precipitation in many parts of the world – an increase of 0.5-1% per decade in many mid and high level areas of the northern hemisphere
- In the same area, there has been a 2-4% increase in the frequency of heavy rainfall events
- In Asia and Africa there has been an increased frequency and intensity of droughts in the last few decades
- Drying has been observed in the Sahel (region south of the Sahara), the Mediterranean, southern Africa and parts of southern Asia. (BBC, 2009)

Although there has been scepticism about some of the 'facts' of climate change, particularly relating to the gathering and analysis of data (not helped in the UK and elsewhere by Climategate),[1] something of a broad consensus or 'grand narrative' now exists that some level of global warming is a reality. What remain disputed are extent, causes, predictions, and responses. Mike Hulme usefully frames climate change as a malleable idea as much as a physical phenomenon, a story (or multiple stories) rather than a fact waiting to be discovered or a problem waiting to be solved. 'Climate change' is a container for a range of discourses, rhetorics, proposals, approaches and practices. The story we choose to tell about climate change depends on our beliefs, our cultural and social contexts, our political persuasion, our priorities, our values, and our interpretations of (conflicting) messages (Hulme 2009, xxv-xxvii). Climate change is thus both political and cultural, prompting Joe Smith to register it a new cultural politics (2011, 17).

A key factor in debates about climate change is the reliability of the scientific data and the computerised modelling of future scenarios. The science of climate change, only one of its many discourses, is inscribed with politics too. Garrard refers to 'neo-colonial environmental scientification', whereby developed countries spoke on behalf of the whole world on the presumption that science is a disinterested and objective practice. Whilst material problems – or environmental changes – are undoubtedly 'real' (such as the depletion of the ozone layer) at the same time they are 'framed within international political discourses that are not scientific, but ideological' (168). A working party report for the fourth international Intergovernmental Panel on Climate Change (IPCC) makes the 'story' – or storying – of climate change transparent:

> Defining what is a dangerous interference with the climate system is a complex task that can only be partially supported by science, as it inherently involves normative judgements. There are different approaches to defining danger, and an interpretation of Article 2 [of the UNFCCC Convention] is likely to rely on scientific, *ethical, cultural, political and/or legal judgements*. (2007; our emphasis)

Whilst the report is transparent about ideological impacts, it neatly sidesteps the issue by claiming, rather too simply, to represent a synthesis of the different perspectives. Acknowledgement of the ideological bent of science aside, this report also reveals starkly the 'uncertainty' of science's propositions: '[T]he error margin is estimated to be in the order of 30-50%' for methane and nitrous oxide emissions, and carbon dioxide emissions from agriculture 'have an even larger error margin' (*ibid.*).

Recalling Bennett's insights cited above, forecasting the future is similarly uncertain, as weather systems are chaotic in themselves (vibrant materials, indeed) *and* part of an assemblage constituted of other actants that exist in relation to and impact upon each other in unforeseen ways. The outcomes of proposed actions must be, by the same token, uncertain. In place of certainties, science now performs rhetoric of risk-taking. The IPCC report itself concludes that,

> climate change decision-making is not a once-and-for-all event, but an iterative risk-management process that is likely to take place over decades, where there will be opportunities for learning and mid-course corrections in light of new information. (*ibid.)*

As Smith puts it, environmental change science is 'not just "unfinished" but "unfinishable"' (2011) offering a clear example of what Silvio Funtowicz and Jerome Ravetz term 'post-normal science' (1991). 'Post-normal science' arguably serves to denaturalise presumptions of 'normal science'; all scientific endeavours are, in realty, unfinished. The unfinished nature of science is the engine that propels it. The science of climate change can only ever be unfinished because the world is unfinished. Perhaps the only certainty is that our environment has been, is and always will be changing. That science is so visibly unable to offer a definitive solution to climate change prompts a new and potentially productive sensibility, the acceptance of uncertainty: of epistemology, of actions, of results, of futures. The 'unfinished' and uncertain nature of science arguably shares some resonance with the ideally 'unfinished' and uncertain nature of performance – performance that leaves room for spectators' engagement and in doing so acknowledges multiple actants.

Emancipated Environmentalists
Whilst there is no shortage of accessible information on climate and environmental change, it has been recognised that its 'grand narratives' – as indicated by the list from the BBC above - have been relatively ineffective in changing behaviours or, as Kershaw suggests at the outset of his article in this journal (*pace* Bateson) we have not yet found a way of curing our global insanity. The uncertainty of unfinished climate change 'facts' may have prevented an assured banking of knowledge; such 'margins for errors' can be at odds with simplifying complex data and presenting environmental grand narratives. Whether for this reason or others, Kagawa and Selby (amongst others) suggest that the imparting of scientific facts has not addressed issues 'holistically' and has focussed on reforming behaviours rather than on the necessity of transformational change (Kagawa and Selby 2010, 5).

An ineffectual response to previous methods has prompted a turn in the discipline of environmental education and its research although, as Marcia McKenzie says 'it is unfortunately not clear that environmental education research *is* making a difference in the face of critical challenges of environment and development' (2009, 217). Identifying a collective amnesia, apathy, a refusal to accept pain, inertia and fear of change (Selby, 2010, 39-40) contemporary theorists are seeking *explanations* for this apathy and inertia, to understand it and lay it bare. In *Living in Denial* (2011), for example, Kari Norgaard uses an ethnographic study of a small village in Norway and asks why the whole village is not concerned with, does not question or act upon global warming. (This is a village that relies on skiing as a major source of income. Decreasing snow levels has already led to shortened ski seasons.) She summarises the village's cognitive dissonance: 'the possibility of climate change is both deeply disturbing and almost completely submerged, simultaneously unimaginable and common knowledge' (p. xix). Hulme suggests that we change the question from 'How do we solve climate change' to 'How does the idea of climate change alter the way we arrive at and achieve our personal aspirations and our collective social goals?' (2009: xxviii) Rather than trying to 'solve' climate change, he asks that we 'approach climate change as an imaginative idea … [which] can serve many of our psychological, ethical and spiritual needs' (329). Perhaps such a shift in approach would effect Kagawa and Selby's desired transformational change. Hulme's framing of climate change as an 'imaginative idea' connects with recent appeals in environmental education to harness research towards the creation of new social imaginaries, a task that may demand the practice of more imaginative research. Such research *searches*, actively mixing up the empirical and affective, less encumbered by those 'orientations to research which emphasize the verifiability and transparency of inquiry' (McKenzie 2009, 222-23). In appealing to the imaginary, McKenzie reminds us of Rosie Braidotti's insights: 'the imaginary marks a space of transitions and transactions… It flows, but it is sticky; it catches as it goes. It possesses fluidity, but it distinctly lacks transparency' (Braidotti 2006, 87; cited in McKenzie 2009 222). The epoch of uncertainty, it seems to us, demands imaginative ('what if') and fluid responses.

The recent 'turn' in environmental education towards a kind of immanent ethnographic querying is paralleled by a move to the personal and participatory – learning as a social practice that offers a situated perspective (see Reid 2011). Perhaps this move is linked to an increasing concern to educate for adaptation – one tactic of adaptation being the necessity to be adaptable, which also embraces a sensibility of uncertainty – as well as or instead of mitigation. 'Mitigation' education has emphasised how we might mitigate against climate change (lights off, heating down, recycling…) Adaptation education stresses adapting to the challenges – and opportunities – of a changed environment and its consequences. (Such a shift to a 'social learning' approach (see Wals 2007) is familiar to those of us who have been educated in and through theatre.) Environmental educators are using social learning to refer to open ended, active learning (interactive, participatory, risky) that may take place in intersubjective and non-formal settings – including the arts, communities and friendships (see McKenzie, 2008). Heila Lotz-Sisitka, for example, writes about climate injustice in relation to South Africa. (Climate injustice infers the poorer south will take the brunt of the effects of climate change caused, predominantly, by the wealthier north's carbon emissions.) Lotz-Sisitka is one who advocates a social learning approach for 'deeper understandings of mitigation *and* adaptation responses [… to] move *beyond* awareness of the scientific facts about climate change' (2010: 73). Social learning is expected to help 'build a capacity to think critically'. Some take this further, situating such learning quite specifically. 'Slow pedagogy' for example, refers to experiential learning through the body (Payne and Wattchow, 2008). It alludes to the slow food movement which seeks 'to reconnect people with where their

food comes from, how and where it is produced and the implications of the choices we make on the environment, biodiversity and our own health' (Slow Food, 2011). A slow pedagogy suggests that we will better understand environmental concerns if we approach learning in non-traditional places – outdoors and in groups – encouraging a more holistic absorption of understanding.

In addition to 'slow pedagogy', environmental educator Philip Payne has developed a particular student-centred approach. Referencing Alistair MacIntyre's historical 'I' (1981) as key in a set of interlocking narratives, the personal, everyday and ordinary is the source of learning, intending to then lead outward to global concerns (1999, 2006). In one article he describes setting his students the task of uncovering the environmental history for an everyday item such as toilet rolls, toothpaste, and cling film; one student learnt that she used 2.6 hectares of cling film during her school life. Each tracked his or her objects eco-historically, learning of its environmental backstory (1997) and Payne notes the impact of such research on the students. He refers to his subject/object-centred theory as a 'critical ecological ontology' which 'stresses inquiries by teachers, students and researchers into the body, the mundane experiential fodder of everyday life and other immediately accessible sites of study. … [It focuses] on the ordinary, day-in day-out "lived experience" "in-here"' (1999: 21).

Contemporary environmental education, then, marks a shift away from the expert-driven towards forms of social learning, and indeed social outcomes. As Hulme suggests, '… the idea of climate change should be seen as an intellectual resource around which our collective and personal identities and projects can form and take shape' (326). Such a constellation of actants will not offer 'certainty'. Participatory practices rooted in the social and personal encourage uncertainties.

As far as we are aware, no-one has called upon the otherwise ubiquitous Jacques Rancière in theorising this environmental turn from scientific expertise, but it is tempting to conceive of such practice as 'emancipated environmentalism'. Rancière's interpretation of the term emancipated begins from a principle of equality founded on an 'equality of intelligence', which opposes intellectual emancipation to popular instruction (2009, 1): 'Intellectual emancipation is the verification of the equality of intelligence' (10). In Rancière's model of learning (drawing upon the practice of nineteenth century pedagogue Joseph Jacotot), the teacher 'does not teach his pupils *his* knowledge, but orders them to venture into the forest of things and signs, to say what they have seen and what they think they have seen, to verify it and have it verified' (11). In this conceptualisation of learning, the distance between the known and the unknown – a gulf typically created and bridged by a knowing expert – is reformulated as 'simply the path from what she [the pupil] already knows to what she does not yet know, but which she can learn just as she has learnt the rest [...]' (ibid.). In place of two types of hierarchized intelligence (the master's and the ignoramus's), is one. In this model, the ignoramus is not emancipated by the knowing master (to whom she remains therefore forever indebted), but delivers her own emancipation (Biesta, 2010).

Comment [CSoSaD1]: Fine to have this references but isn't this clear from Ranciére's own work in *The Ignorant Schoolmaster?* Not clear what is particularly 'Biesta' about this.

Comment [D2]: I presume so, but I haven't actually read that text.

As already noted, one of the many 'beginnings' for our themed edition on Environmentalism was Bottoms' contribution to *RiDE* 15.1 in which, in the context of a review of Baz Kershaw's monograph, *Theatre ecology: environments and performance events* (2007) he formulated a troubling question, 'Since raising broader awareness about environmental issues is arguably the most urgent task in the world today, why is it that the applied theatre sector […] seems to have been comparatively slow to pick up the ecological baton?' (2010, 121) The question itself partly troubles because it provokes another: is raising broader awareness about environmentalism

the most urgent task in the world today? Might 'broader awareness' be too easily become what Hulme describes as a 'deficit model' of communication:

> Quite a lot of climate scientists still think in terms of the 'deficit model': if only we can have greater clarity, more access to the public, better science writers, then we will bring these recalcitrant and unruly people to book. We see plenty of evidence that climate scientists think in terms of this linear flow: 'we are the ones with the truth, the prophets who can see the future, and it's these people that we have to convince'. That is a deeply unhelpful way to bring science into public and political discussion. The metaphor of circularity, plurality, multiplicity, multi-vocality, is a much more engaging one. It gives us many more resources to work with creatively as a society or as a global collection of societies. (2011, 84)

The notion of 'raising broader awareness' and 'deficit models' presumes a form of pedagogy counter to a concept of the emancipated intellectual and her sister, the emancipated environmentalist.

In thinking through a theory of emancipated environmentalist pedagogy within applied theatre contexts, it is worth noting tensions surrounding 'deficit models' of communication in 'mainstream' theatre practices too. The endogamous relationship between 'theatre' and its 'applications' suggests that matters explicit in 'mainstream' are relevant to applied.

UK (mainstream) theatre has, more or less, eschewed environmentalism until recently. (Mike Bartlett's *Earthquakes in London* was the first National Theatre production ever to address the issue, in 2010.) Robert Butler has cited six reasons for this endemic theatrical lacuna. Climate change issues in the theatre: do not easily fit theatre's 'cause and effect' dramaturgical model; suggest 'science' and would therefore be technical (and in turn alienating); self-indict theatre's excess of energy-use; are not tackled because theatre-makers are unsure about their own response to the issues; imply agit-prop or apocalyptic theatre which producers have apparently been reluctant to undertake; are at odds with the sponsors – fossil fuel companies – of many arts organisations (Butler, 2008). From mid-2009, however, a number of significant climate change plays appeared in UK 'mainstream' theatres.[2] A major tension emerges in these productions, primarily construed in the uneasy balance between public message and personal story. Whichever the emphasis, it has resulted in an ambivalence or even hostile reception from spectators disengaged at various levels: from the productions and from the various issues raised within them.

Reviews of and online comments made in response to the recent National Theatre production, *Greenland* (Buffini et al 2011), a play by four writers engaging with the issue of global warming, indict informational models of theatre practice. Paul Taylor, for example, writing for *The Independent*, admits that although the piece is brilliantly directed and stunningly designed, 'yet, there is something in me that resists this clever, topical, many-stranded piece' (2011). Although purporting to care about the issues presented, Taylor responds to the characters in the play as little more than 'debating positions', with the play ultimately feeling 'too much like a public-service broadcast that did not tell one much that is new'. A reader's reply, left by 'Simon' on the same site, confirms this perception: 'there was nothing much in this play that was new or that isn't thrust at us every day through the media […]. I go to the theatre to learn and to enjoy, not to be lectured. I left having 'endured' two hours of thunderous hectoring.'

When not 'hectored', as in *Greenland* (and in parts of *Earthquakes in London*), environmental issues have been sidelined for human relationship narratives. Richard Bean's *The Heretic*, performed to a comfortably amused audience at London's Royal Court Theatre (2011), has a climate sceptic academic as its protagonist whose views are affirmed by a twenty year old Betel-nut tree in the Maldives remaining as distant from the water as when planted. Despite dialogues of science, 'climate change' felt merely a device for the theatrical development and exploration of three sets of relationships – albeit wittily and adroitly drawn. Similarly, in *Water* (by Filter and David Farr, Tricycle Theatre Kilburn, 2011), whilst the characters included a son seeking resolution about his 'sold-out' environmentalist dead father and a female climate change campaigner, it is the relationships that drive the play and not the issues. As one critic said: 'it's the show's down-to-earth glimpses of a grown man whose Canadian half-brother got the paternal love he lacked, and his mourning of that loss, that stays with you long after all thoughts about global warming have evaporated' (Cavendish, 2011). This lack of thematic impact is not limited to the mainstream. Nutshell's *Allotment* (Inverleith Allotments, Edinburgh Fringe Festival 2011), received a CSPA (Center for Sustainable Practice in the Arts) Fringe Award, rewarding both sustainable production practice and work addressing sustainability themes. Seated on the edge of an allotment on a warm Scottish summer day, this was a pleasurable event but sustainability messages were limited to Inverleith Allotment noticeboards advertising flower and vegetable shows. A human relationship narrative was central to this production, not sustainability issues, and the allotment-actant (with all its billions of other actants) simply offered a cosy, site-relevant setting for a contrasting dark story.[3]

Many of these productions fail to convince as 'climate change' plays with audiences remaining unengaged and unaffected by environmental themes. Where the balance is tilted towards the emotional narratives of human relationships, those who seek sophisticated theatre addressing climate change are disappointed. This presents a particular kind of 'deficit model'. Where climate change issues are immanent, as is the case with *Greenland*, theatre is in danger of the deficit model to which Hulme refers. The risk for performances that seek to engage with complex issues of environmental and climate change is precisely that of presenting information or opinion in a closed and didactic manner. Even if the opinion being presented (as *Greenland* claims) is one of 'complexity' or 'uncertainty', such an opinion of uncertainty is, paraodoxically, unambiguous. Lawrence Buell's insights relating to Rachel Carson's still influential book, *Silent Spring* (1962), although made in the context of literature rather than drama, remain instructive:

> Any serious reader knows that the kind of art, the kind of criticism which takes the form of a waywardly insinuating thought experiment can be more instructive than the overtly polemical kind which 'has a palpable design on us', as John Keats dismissively put it. (Buell, 2005, vii).

Nevertheless, Buell also recognises that 'the two nodes need each other, even as they pull against each other'. It is the combination of artistry and reality, of aesthetics and world, that has the potential to produce affect. (This resonates with McKenzie's appeal to imaginative research, noted earlier.) This combination has eluded much recent UK theatre engaging with environmental issues. Perhaps Wallace Heim is right when she stated at a network event (described below), 'Don't put environmentalism on stage'.

Having cited Rancière's figure of the emancipated intellectual, his idea of the emancipated spectator also proves useful here, for the emancipated spectator is one who brings to a work of art her own gaze, her own work of narration and translation,

appropriating the story in order to make it her story (Rancière 2009, 17; 22). All subjects share this capacity for narrating and translating, and before a work of art, all are thus equal; it is in this equality of the spectator that Rancière locates collective power (2009, 16). However, for the work of narration and translation to take place, the work of art must leave space *for* the spectator. For Rancière, political art works on the border between readability and 'a perceptual shock caused, conversely, by the uncanny, by that which resists signification' (2004, 63); of the world and yet, at the same time, not of it.

Rancière's understanding of the emancipated spectator necessarily erases at the outset the proposition or possibility of a work instructing or forcefully raising the consciousness or awareness of its audience.

> The images of art do not supply weapons for battles. They help sketch new configurations of what can be seen, what can be said and what can be thought and, consequently, a new landscape of the possible. But they do so on the condition that their meaning or effect is not anticipated. (2009, 103)

In considering the context of applying performance practices to the matter of environmental and climate change, Rancière usefully reminds and cautions that whilst art can 'rework the frame of our perceptions and the dynamism of our affects', the 'outcome' of art does not abide by a cause-effect schema: '[T]here is no straightforward road from the fact of looking at a spectacle to the fact of understanding the state of the world; no direct road from intellectual awareness to political action' (2009, 75). Thus Bennett and Rancière overlap in terms of the unpredictability of outcomes within a diverse field of actants (although Rancière would attach agency to humans only – see Bennett, 2010, 106). Following Rancière, attesting political affect as an unpredictable relational quality does not denude performance of its potential because it is precisely the undecidability of a work that renders it political and critical. Its openness and heterology demand the participation of the spectator.

To be an emancipated environmentalist – in education or in theatre or just to be – is to favour uncertainties and unpredictabilities, avoid the nomothetic and polemic and incite the equality of intelligence of the participatory individual in matters of environmental import. Environmental education has taken a turn in this direction although theatre remains lagging behind, it seems. We, too, have 'turned' in this direction, away from didacticism and towards emancipated learning, engaging in site-orientated 'precarious' practices undertaken in an intersubjective space of pedagogy made available through the architectures of a network (see McKenzie, 2008).

Precarious Practices
Our claims for uncertainty and, following on, emancipatory environmentalism arise from the always present constellation of events and – more radically - assemblage of actants (as outlined in Beginnings, above). Participating in a vibrant network in 2010-2011 with human and non-human 'vital players' facilitated practical research which provoked, confused, frustrated, initiated, attested and upturned our embryonic theorisings.

Led by Bottoms, the UK Arts and Humanities Research Council network, 'Reflecting on Environmental Change through Site-Based Performance'.[4] engaged a number of academics and practitioners (and academic-practitioners) including PLATFORM, Julie Laffin, Baz Kershaw, Mike Pearson, Alan Read, Alan Reid, Phil Smith, Tony Jackson, Helen Nicholson, NVA, Fevered Sleep and Dead Good Guides. We were invited to think through the actual and potential relationships between site-specific

performance and environmental change. At the outset, the term environmental change was intended to include, but not be limited to the question of climate change.

As two members of the network steering group we offered to curate the second of three workshop weekends, choosing to locate this middle one in Scotland, home turf for Dee. Anticipating this themed edition of *RiDE*, our workshop took as its focus 'learning and communication'. Responding directly to Bottoms' stated concerns about applied drama being harnessed to raise awareness of environmental issues, we wanted to explore how site-based performance could specifically enhance learning about environmental issues. Our brief drew, too, on our already circulated call for papers for this journal, reproducing questions such as 'What work is being made in the interstices of environmentalism and performance, applied theatre, drama education and how is this being researched?'. A public symposium at the University of Glasgow (February 2011) included presentations from five speakers: Angus Farquhar from the ecological and public art Scottish-based theatre company, NVA; academic geographer Chris Philo discussing 'children's geography'; David Harradine, artistic director of Fevered Sleep; Alan Reid, academic in Environmental Education and editor of *Environmental Education Research*; Wallace Heim, network member and co-director of the Ashden Directory.[5] Certain ideas raised at the symposium, including site as improvisatory agent, covert education, slow pedagogy, and a poetics of inattention attached themselves to network members, travelling with them to the second and third day of the network event.

Following this public symposium, network members moved on to Cove Park, where they spent one and a half days exploring how – or, indeed, whether – a triptych of environmental change, site-based performance and learning/communication might usefully be conjoined. Situated on the peninsula of Rosneath, Cove Park is an artists' residential site on the west Coast of Scotland, 60 miles by road from Glasgow. As network members settled into the various sites that make up Cove Park (shipping containers turned into sleeping cubes and recycled 'pods' from the *Castaway* reality television programme) it seemed fitting to encounter a register of names left from the previous inhabitants: artists from the Cape Farewell programme which in 2011 focused its energies on an expedition of Scottish islands, 'investigating the impact of climate change on the cultures and ecologies of Scotland's island communities' (Cape Farewell, 2011).

Cove Park, perched high on a hillside, offers a panoramic view over Loch Long. From this perspective, it is easily portrayed as an idyllic, romantic site, offering artists' shelter in what seems like relatively remote Scotland.[6] Dee's blogged account of her Cove Park experience conjures something of the idyll:

> Those picture windows [in the communal dining area] *do* frame an iconic landscape. It *is* pleasurable to sit and watch the picture change second by second, as rain tips down in sheets, as rays of sun puncture white clouds and glance off the still loch, as the hills disappear in mist and then reappear in their majestic glory. (Heddon, 2011)

However, to set up Cove Park as a site of 'nature' in contrast to the cultural urban (the next site of the network was London) would be to fall into binarised ways of casting nature and culture. In any case, Cove Park is extremely poorly placed as an icon of rural, sustainable living with its too hot or too cold accommodation and main space, all of which lack effective insulation; and any commitment to low food miles would lead to a limited diet, especially during the winter months. Prior to being Cove Park, a 50 acre artists' retreat, this site was a Conservation Park (the still-resident Highland Cows, sheep and ducks enduring testimony to that previous incarnation);

and before it was a Conservation Park, it was an ammunition store during WWII (one Nissen hut remains intact, but the concrete foundations of others punctuate the landscape); and before it was an ammunition store, it was a rubbish dump. A sign inside the communal building, made by visiting student artists, has wittily retitled the place a 'conversation park' – not an inappropriate act given that one of its founding aims is to engage artists from across disciplines in dialogue. Cove Park was particularly interesting as a strategically paradoxical site for the network because of its more global neighbours. It is situated between Faslane and Coulport (which make up HMS Naval Base Clyde). Faslane is home to an arsenal of nuclear-powered and nuclear-armed submarines. Coulport, meanwhile, is the store house for trident missiles. Nuclear submarines travel from Faslane to Coulport – through the calm waters of the panoramic view beneath us – to pick up their nuclear warheads, then sailing back and out to sea.

The sheltered ecology of artists, lochs and hills that Cove Park seemed to offer was in fact situated between the nuclear warheads and submarines of a global military zone. Cove Park, as a site, placed us precariously on balancing points – rather than tipping points – of nature and culture, refuge and exposure: both beautiful and deadly, cosy and exposed. 'Precarious' was a word chosen by a number of the network members to describe their experience at Cove (including Paula Kramer, Stephen Bottoms and Baz Kershaw). In Cove Park, the precarious was in obvious ways bound up with the location, the proximity of the 'retreat' to two nuclear naval bases. But precarious also alluded to the state of the facilities, exposed to and made increasingly precarious by the material effects of its literal exposure: manmade paths eroded by torrents of water, windows unable to withstand the windblown sheets of rain. The poor repair of the buildings also testifies to the precarious funding situation of Cove Park.

As the main activity of our 30 hours at Cove was to create a piece of performance, precarious is also an appropriate way to describe the sense of exposure some of us felt in making and showing our work to each other: exposed, uncertain and in the context of a group of peers, in our own way risk-taking. Making work brings in to sharp focus the constant process of both calculating and yet always being uncertain, of making seemingly informed choices from a raft of possibilities but without being sure of the outcomes, of improvising and changing course – making other choices – as the situation suddenly demands (and one huge change in the situation is the presence of the audience – a host of actants),[7] of the fragility of practice and its always attendant risk of failure. Making the work in this site, as the rain tipped down, doubled the precariousness: Bottoms working on/in the multiple, emerging fast streams that flowed down a steep bank; Kramer supported by/supporting the exposed roots of an ancient tree; Helen Nicholson consuming the remains of umpteen breakfast cereals left on site, well past their sell-by dates; David Harradine literally exposed, naked, to the wintry elements of the hillside.

Nicolas Bourriaud (2009) writes too of precariousness, citing Zygmunt Bauman's notion of a 'liquid modern society', where everything is disposable (2005), and Ulrich Beck's much earlier description of a 'risk society' (1984) in which the individual, in an environment of universal precariousness, becomes the object of 'invisible impoverishment' (cited in Bourriaud, 2009, 81). On the one hand, Bourriaud also registers this precariousness that stands at the heart of the capitalist machine, a rejection of the durable. But on the other he recognises a more generative concept of the precarious – the transitory, the shifting, the fragile – when attached to a regime of aesthetics. As Bourriaud writes,

art preserves intact an image of reality as a fragile construction and carries the torch for the notion of change, the hypothesis of a Plan B. If contemporary art is the bearer of a coherent political project, it is surely this: to introduce precariousness into the very heart of the system. (2009, 99)

Art, belonging to the realm of fiction, returns reality to its precariouness, 'to the unstable mixture of real, imaginary, and symbolic that it contains' (100). That the world *is* precarious, is always provisional, provides reasons to imagine different futures. As Garrard also writes, from an ecological but equally expansive frame, the Earth is not a fixed object, but a process (178).

Reflecting on the performances devised at Cove Park, they might be framed as models of indirect, covert action, harnessing the power of imagination; and precarious both in their materiality and in their conceits, using Bourriaud's notion of precarious as transitory, shifting and fragile. Tellingly, Bottoms' first writing about the weekend admitted that 'Some of us perhaps worried at times [...] that we weren't addressing the "environmental change" thematic at the network's heart with sufficient directness.' However, as Bottoms notes, the direct address of the thematic was substituted by an attentiveness to the surroundings and each other. Indeed, 'it was this quality of attention that seemed crucial in moving us from discussing "issues" in the abstract, and towards an awareness of environment that was grounded in the experiential' (Bottoms, 2011). The experiential demands a being 'in' place, rather than presuming to stand outside of or above it. For Bottoms, the very idea of 'reflecting on environmental change' became palpable through embodiment; embodiment is the core of Bottoms' and Laffin's contribution to this themed issue too, as the authors discuss how Laffin literally lives with, registers and adapts to her environment. At Cove Park, Bottoms' performance actions included negotiating the streams, jumping from one precarious, soggy patch of grass to another, across the water: 'This was a site which seemed to change, environmentally, almost by the hour' (*ibid.*). This was site as collaborator, too, enabling the storying a starfish, rather than a snake.

Such attentiveness to the details of the site and our locations within it seemed to perform a function of scaling – not only bringing the human down to (its) animal size (no more nor less), but also framing 'environmental change' as something here, present, and everyday – albeit an everyday layered with histories of other environmental use alongside our autobiographical histories (we too are constantly changing environments). If the grand narratives of environmental change – particularly those of apocalypse and tipping points – induce denial or paralysis, what might an encounter with the small make possible? Helen Nicholson captured something of the potential of attentiveness to detail, a 'kind of affective engagement with things – human, non-human, imagined, material – that disrupts the orderliness of the world and invites learning to become intimate' (2011), a learning which includes attending to those everyday moments when we are called upon to make one choice over another. Environmental change is not something apart from our lives. We are in it, and as Bennett would have it, it is in us too. Nicholson idenitified that working imaginatively in the vernacular spaces of the everyday 'has the potential for what Lefebvre calls "the politics of small achievements"' (*ibid).* The accumulation of miniatures, over time, might reshape the everyday. Such attentiveness, then, provides a bridge between apocalyptic scenarios and human stasis.

Sally, too, was drawn to the idea of a small gesture, but her work pressed home that the small is expansive, refusing the association of small with insignificant (and here we recall Doreen Massey's insistence that the global and local are not separate, but coincide and co-exist (2005)). For her piece, Sally chose to comment on a fragment

of energy waste amidst the overwhelming size of issues that we were grappling with, not least, the global and local complexity of living with nuclear warheads and their stealthy carriers. Every five to ten minutes over a two hour period, she photographed a light that had been left on during the day (and which was thereby almost covert), remaining in the space until dusk came when it would actually be needed, when it actually became light. Such attentiveness made visible the wasted energy.

For the full sequence of lights, see
http://performancefootprint.co.uk/documents/glascove/story-of-a-light/

Whilst waiting, Sally wrote on either side of a (recycled) tablecloth alternating between her mother's environmental change on one side and 'what little she knew' about current global environmental issues on the other. This was a personal reflection on different forms of environmental change which were exercising her. (Her mother was moving to a home and selling her cottage after 35 years. They were in the midst of this quite painful transition during the period of the network event, with Sally spending virtually every weekend in Monmouth. Sally was stationary in front of a light in Scotland instead of clearing a cottage in Monmouth. She considered the flipping of the sides of paper as a conversation between guilts.) Whilst many network participants made comments on the temporal layering of Cove Park, from its glacier silt to its wartime armaments to its recent state as a conservation park, Sally was more preoccupied with the present of spatial folds rather than the temporal layers.

Reflecting on notions of scale and subjectivity, and acknowledging the funding scheme of which the network was a part, Sally described her piece as 'Living with Environmental Change: the upper case and lower case'.[8]

The Upper Case:
• 'Living with Environmental Change is a partnership of 22 major UK public sector funders and users of environmental research, including the research councils and central government departments. The 10-year programme aims to optimise the coherence and effectiveness of UK environmental research funding and ensure government, business and society have the foresight, knowledge and tools to mitigate, adapt to and capitalise on environmental change.' (http://www.lwec.org.uk)
• Living with Environmental Change is the politics of inconvenient truths-and-lies and Planet Stupid [a reference to two polemical contentious films, *An Inconvenient Truth* and *The Age of Stupid*]
• Living with Environmental Change is hearing of recent nuclear waste at Faslane and Coulport.
• Living with Environmental Change is not knowing how to Live with Environmental Change or how to communicate it or how to encourage the learning of it…

the lower case:

• living with environmental change is watching a mother change her environment, happily leaving behind a life-belongings in moving to a home. [On the train back to London, David Harradine tells of a colleague's great-aunt who had lived globally. Finally, by way of a house, flat and room, she spent her last two months in one chair.]

• living with environmental change is feeling I should be supporting in Monmouth and not sheltering so richly in the Scottish environment.

• living with environmental change is barely noticing a light in the day as we pass.

• living with environmental change is turning away from large scale space, the nuclear and Scottish grandeur to attend to detail.

Before setting off to Cove, we – Sally and Dee – anticipated that the work of our site-specific practice at Cove Park would be rich with global commentary about 38 tomahawk cruise missiles lodged inside the HMS Astute, the migration to the north of wildlife as a result of global warming, deforestations (there is a forestry plantation just behind Cove Park) or decreasing snowlines. In fact, as the network blog makes clear, as a group we attended to the detail of more covert ecologies, to the minutiae, to the specific, to the personal. In the face of the public, the macro, the global, the largescale, many of us turned to the private, the micro and the local – an aesthetics of anti-awe and anti-climax that nevertheless allows for infinite reverberations. Alison Parfitt's autobiographical work, for example, drawing on her lived experiences of being an environmental activist, offered an intimate reflection on being and being about, rather than being about environmental change. In the process of making work, the abstract became the particular.

As part of a teleology of events, the network's 'Glascove' weekend shifted our environmental thinking, then. In some respects, in relation to the brief of the network and the brief of the weekend, we 'failed'. We veered away from uncovering innovative methods of facilitating learning and communicating about environmental change through site-based performance. But success perhaps lies in realising that we could only ever fail in that. Raising awareness – as we have identified above – is fraught with complexity and surely is not the task: whose awareness and about what? Instead, we became mired in subjective detail, uncertainty and precariousness, 'our learning 'located in the space between being sensate and making sense' (McKenzie, 2008, 365). We were cold, we were wet, we were uncertain and anxious, working on hunches, instincts, and feelings simply to make something; performed events which in turn prompted jumbles of thoughts, confused responses teased out further through collegiate discussion and dialogue offering a range of perspectives – conversation: conservation. Through such unpredictable, mostly amateur means we puzzled our way towards proposing our – highly sociable and predominantly outdoor – experience as a form of emancipatory environmentalism. Befittingly, we continue to wonder if this is useful.

Endnote: uncertain ecocriticisms

In introducing this themed journal on environmentalism, this precursor piece to the articles has seen us, Dee and Sally, as macro-actants placing our own practices within cognate turns and shifts in contemporary thinking. We have tried to be mindful of more radical assembleges of actants in this process, a scoring of uncertainty, unpredictabilities and even precariousness at every point, linked to a comprehensive distaste for deficit models of communication. Our two-year interrogation – since Bottoms laid his provocative challenge to applied theatre – has intrigued us both. In ending this piece, it would be remiss to ignore Bottoms' 'call to arms'; however we

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Comment [D3]: Why square paranthesis?

Comment [D4]: Do you think people will understand this title?

would playfully challenge him now. Where batons have been slowly picked up is not so much in applied theatre – or even, recently, mainstream theatre – but in theatre ecocriticism. *This* is the lacuna in the field. Theatre – in all its manifestations – has been fleet of foot in recent years; research lags behind.

Theresa J. May reminds us that as far back as 1994, in a themed edition of *Theater* edited by Una Chaudhuri, Erika Munk found 'playwrights' silence on the environment as a political issue and our critics' neglect of the ecological implications of theatrical form astonishing' (Munk, 1994, 5; May, 2007, 95). A similar statement, in relation to drama at least, was made in the UK by Bill McKibben a decade later, albeit more rhetorical:

> One species, ours, has by itself in the course of a couple of generations managed to powerfully raise the temperature of an entire planet, to knock its most basic systems out of kilter. But oddly, though we know about it, we don't know about it. It hasn't registered in our gut; it isn't part of our culture. Where are the books? The poems? The plays? The goddamn operas? Compare it to, say, the horror of AIDS in the last two decades, which has produced a staggering outpouring of art that, in turn, has had real political effect. (2005)

But McKibben's article is arguably marked by its historical moment. As we have noted above, recent years have seen a marked increase in main stage UK theatre productions which engage with issues of climate change and environmentalism. In addition to these mainstream productions are the many UK touring, fringe and experimental shows including, notably, Puppet State Theatre's award-winning *The Man Who Planted Trees* (from 2006), PLATFORM's audiowalks such as *And While London Burns* (2006/7), Metis Arts' participatory work, *3rd Ring Out: Rehearsing the Future* (from 2010; see Lucy Neal and Zoe Svendson, this edition), and Look Left Look Right's verbatim drama, *The Caravan* (2007).[9] Numerous additional touring theatre, participatory and theatre-in-education companies directed towards children, and young people, also have a specifically ecological or environmental focus, including Fevered Sleep, Jellyfish Theatre, Purple Broccoli Theatre, Eco Drama or Environmental Arts Theatre Company. Other more general young people theatre companies have toured 'environmental' productions such as the (recently closed) Theatre Venture who produced the participatory, engaging and enlightening *Carbon Footprint Detective Agency*. Live Arts festivals have also addressed climate change issues, including Artsadmin's annual Two Degrees Festival, (www.artsadmin.co.uk/twodegrees) and the Arnolfini's '100 Days Countdown', programmed to coincide with the 15th UN Conference of the Parties on Climate Change meeting in Copenhagen (CoP 15, 7th December 2009).

Notable in both Artsadmin's and Arnolfini's programming is the blur between activism and aesthetics, as creative practices are developed to engage with climate change concerns); PLATFORM and the artists-activists collective Laboratory of Insurrectionary Imagination offer clear examples of such work (Labofii).[10] Everyday practices are both scrutinised and harnessed as ways to explore a range of issues, from the carbon footprint of a family of artists (see Gary Anderson and Lena Simic, this edition), to the potential of performative walking as an embodied mode of engagement and persuasion (see Jess Allen and Sara Penrhyn Jones; and David Haley, this issue). Finally, companies that might be considered site-specific in that they create work with and for a particular community, also have histories of engaging with environmental issues, and in particular the environments to which they are connected – and through which the practice itself creates multiple connections. A challenge for the field is that the very situatedness of this work, its commitment to the

geographically local, can mean that it often slips under the critical radar (see Kerrie Schaeffer, on MED, this edition).

In addition to cultural work that is performed, policy-related organisations and action plans are also visible in the UK. Julie's Bicycle – with the by line 'Sustaining Creativity' – was founded in 2007. Encouraging the development of low carbon businesses, its remit is to 'make environmental sustainability intrinsic to the business, art and ethics of music, theatre and the creative industries'.[11] Also facilitated by Julie's Bicycle is the Green Theatre Network. In 2008, the Mayor of London launched the Green Theatre Plan, intended to support theatres in their reduction of carbon emissions by 60% by 2025.[12] In 2010, the National Theatre and the Arts Council of England hosted a national conference, 'A Low Carbon Future for the Arts?' and Lift hosted a symposium at the ICA, 'The Climate for Theatre', both in London.

Given the claim that climate change is a new cultural politics, the lack of *research* that engages directly with the relationship between theatre and environmentalism is far more striking than a lack of activity itself – which in fact appears to be increasingly lively. As Theresa J. May notes, although ecocritical discourse in *literary* studies has entered its third decade, 'a comparable discourse in theatre studies has been slow to take route' (2007, 95). Bottoms, in his review of Kershaw's monograph, maps out the critical field of theatre and performance studies, citing a range of recent 'significant books' which engage with questions of ecology and environment. These include Gabriella Giannachi and Nigel Stewart's edited collection, *Performing Nature* (2005), Mike Pearson's *In Comes I: Performance, Memory and Landscape* (2006), and Bottoms' own text, co-authored with Matthew Goulish, *Small Acts of Repair: Performance, Ecology and Goat Island* (2007). The majority of texts cited by Bottoms do not, in his words, 'prioritise the environmental crisis itself' – which makes Kershaw's text still somewhat unique. At the time of writing, there does not seem a great deal of material to add to this library. In 2010, the journal *Canadian Theatre Review* issued a themed edition, 'Theatre in an Age of Eco-Crisis' and Downing Cless published *Ecology and Environment in European Drama* (which reviews mostly canonical texts, including *A Midsummer Night's Dream*, *The Birds*, and *Dr. Faustus*). 2011 saw the publication of *Ecocritical Shakespeare* by Lynne Bruckner and Dan Brayton. Coinciding with the publication of this themed journal, in 2012, Bottoms, Aaron Franks and Paula Kramer will issue a themed edition of *Performance Research*, titled 'On Ecology'.

Recognising the increasing visibility of a range of theatre-related activities that engage with the interrelationships between theatre, environmentalism and climate change – and these do include the broad field of applied drama – the apparent lack of eco-critical analysis and theorising remains surprising. It certainly acts as another prompt for this themed edition. Criticism and research, it seems, needs to catch up with practice and policy and we hope that the work included here marks at least one response to the current gap. This 'introductory' article is explicitly that: introducing and interrogating *some* relevant fields, and weaving these with our own developing, sometimes autobiographical, and certainly UK-based, research. It willingly embraces the precariousness of knowledge production. Although the outcome of multiple actants (human and non-human alike), it remains one contribution. Even here, the privileging of the emancipated, uncertain environmentalist in our purview would benefit from further unravelling. It is a 'restorying' (MacKenzie et al, 2009), a re-presenting of older narratives about 'the environmentalist'. with a different critical edge. Kelly Teamey suggests in her critique of Mackenzie's *Fields of Green: Restorying Culture, Environment and Education* Kelly Teamey suggests such a restorying should:

> …redirect, refocus and reanimate embodied experiences in relation to culture, environment and education, including our everyday actions, emotions, feelings, spiritual desires and practices, as well as our intimate relationship to the land and Earth. (in press)

Our restorying of the environmentalist takes up one baton in offering a theory for an emergent field. The following articles take up several different batons, engaging a range of eco-philosophies in this bid to privilege and forge ecocriticism and applied theatre. We pass over to them.

Comment [D5]: Super

References

Bartlett, Mike. 2010. *Earthquakes in London*. London: Methuen Drama.

BBC. 2009. Climate Change Key Points, http://www.bbc.co.uk/climate/evidence/key_facts.shtml (accessed 28 December 2011)

Bean, Richard. 2011. *The Heretic.* London: Oberon Books.

Bennett, Jane. 2010. *Vibrant Matter: a political ecology of things*. Durham and London: Duke University Press.

Biesta, Gert. 2010. A New Logic of Emancipation: The Methodology of Jacques Rancière. *Educational Theory*, 60, no. 1, 39-59.

Bottoms, Stephen. 2010 Review of *Theatre Ecology*. *RiDE: the Journal of Applied Theatre and Performance* 15.1: 121-26.

Bottoms, Stephen. 2011. Cultivating Attentiveness? Responses to Glasgow/Cove Park. http://performancefootprint.co.uk/2011/02/cultivating-attentiveness-responses-to-glasgowcove-park/ (accessed 9.8.11).

Bourriaud, Nicolas. 2009. *Altermodern*. London: Tate Publishing.

Braidotti, Rosie. 2006. Posthuman and all too human. Towards a new process ontology. *Theory, Culture and Society* 23, no. 7/8, 197-208.

Buell, Lawrence. (2005). *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination.* Oxford: Blackwell Publishing.

Buffini, Moira, Charman, Matt, Skinner, Penelope and Thorne, Jack. 2011. *Greenland*. London, Faber and Faber.

Butler, R. 2008 Why theatres don't touch climate change http://ashdenizen.blogspot.com/2008/11/six-reasons-why-theatres-wont-touch.html (accessed 1.1.12)

Cape Farewell. 2011. www.capefarewell.com (accessed 28 December 2011).

Cavendish, D. 2011 Water, Tricycle, review, http://www.telegraph.co.uk/ culture/theatre/theatre-reviews/8311860/Water-Tricycle-review.html (accessed 3.3.11)

Deleuze, Gilles and Claire Parnet. 2007. *Dialogues II*, NY: Columbia University Press.

Funtowicz, S.O. and Jerome R. Ravetz. 1991. A New Scientific Methodology for Global Environmental Issues. In *Ecological Economics: The Science and Management of Sustainability*, ed. Robert Costanza, 137-152. New York: Columbia University Press:

Garrard, Greg. 2004. *Ecocriticism*. London: Routledge.

Gough, Noel. 2009. Becoming Transnational: Rhizosemiosis, Complication Conversation and Curriculum Inquiry. In *Fields of Green: Restorying Culture, Environment and Education*, ed. M. MacKenzie et al., 67-84. Hampton Press: Creskill.

Heddon, Deirdre. 2008. *Autobiography and Performance*. Palgrave: Macmillan.

Heddon, Deirdre. 2009. One square foot: thousands of roots. In *Walking, Writing and Performance: Autobiographical Texts*, ed. R. Mock, 153-177. Bristol: Intellect Books.

Heddon, Deirdre. 2011The Scottish Weekend: One Account. http://performancefootprint.co.uk/2011/02/the-scottish-weekend-one-account-dee-heddon/

Hulme, Mike. 2011. In *Culture and Climate Change: Recordings* eds. Robert Butler, Eleanor Margolies, Joe Smith and Renata Tyszczuk https://docs.google.com/viewer?a=v&pid=explorer&chrome=true&srcid=0B8fHkqZ4bCVFNzMyYWI1YzctM (accessed 5 February 2012)

Hulme, Mike. 2009. *Why We Disagree about Climate Change: Understanding Controversy, Inaction and Opportunity.* Cambridge: CUP

IPCC. 2007. Working Group III: Mitigation of Climate Change
http://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch1s1-2-2.html (accessed 28.12.11)
Kagawa, Fumiyo and David Selby. 2010. Introduction. In *Education and Climate Change: Living and Learning in Interesting Times,* eds. Fumiyo Kagawa and David Selby, 1-11. New York and London: Routledge.
Kershaw, Baz. 2007. *Theatre Ecology: Environments and Performance Events*. Cambridge : Cambridge University Press.
Lotz-Sisitka, Heila. 2010. Climate Injustice: How Should Education Respond? In *Education and Climate Change: Living and Learning in Interesting Times,* eds. Fumiyo Kagawa and David Selby, 71-88. New York and London: Routledge.
MacIntyre, Alistair. 1981. *After Virtue: A Study in Moral Theory*. London: Duckworth
Mackey, Sally. 2007a. Performance, place and allotments: *Feast* or Famine? *CTR* 17.2:181-191.
Mackey, Sally. 2007b *Performing Place: the Caer Llan Trilogy* DVD Rom. Published in *Research in Drama Education: the Journal of Applied Theatre and Performance* 12.2.
Massey, Doreen. 2005. *For Space*. London: Sage Publications.
May, Theresa J. 2007. Beyond Bambi: Toward a Dangerous Ecocriticism. *Theatre Topics* 17:2: 95-110.
McKenzie, Marcia. 2008. The places of pedagogy: or, what we can do with culture through intersubjective experiences. *Environmental Education Research* 14, no. 3, 361-373.
McKenzie, Marcia. 2009. Scholarship as intervention: critique, collaboration and the research imagination. *Environmental Education Research* 15, no. 2, 217-226.
McKibben, Bill. 2005. What the warming world needs now is art, sweet art. In *Grist*.
http://grist.org/living/mckibben-imagine (accessed 9 February 2012)
Munk, Erika. 1994. A Beginning and End. *Theater* 25, no. 1, 5-6.
Nicholson, H. 2011. Attentiveness/Attentive/Paying Attention http://performancefootprint
.co.uk/2011/02/attentiveness-attentive-paying-attention/
Norgaard, Kari Marie. 2011. *Living in Denial: Climate Change, Emotions, and Everyday Life.* Cambridge, Mass. and London: The MIT Press.
Payne, Phillip and Wattchow, Brian. 2008. Slow Pedagogy and Placing Education in Post-Traditional Outdoor Education. *Australian Journal of Outdoor Education*, 12(1): 25-38.
Payne, Phillip. 1997 Embodiment and Environmental Education. *Environmental Education Research* 3:2, 133-153
Payne, Phillip. 1999. Postmodern Challenges and Modern Horizons: education 'for being for the environment'. *Environmental Education Research* 5:1: 5-34.
Payne, Phillip. 2006. Environmental Education and Curriculum Theory. *The Journal of Environmental Education* 37, no.2: 25-35.
Rancière, Jacques. 2004. *The Politics of Aesthetics: The Distribution of the Sensible*. Trans. Gabriel Rockhill, London: Continuum.
Rancière, Jacques. 2009. *The Emancipated Spectator*. Trans. Elliott, G., London: Verso.
Reid, Alan. 2011. Environmental Education Debate. In J. Newman (ed) *Green Education: An A-Z Guide,* 149-155. Thousand Oaks: Sage..
Selby, David. 2010. 'Go, Go, Go, Said the Bird': Sustainability-related Education in Interesting Times. In *Education and Climate Change: Living and Learning in Interesting Times,* eds. Fumiyo Kagawa and David Selby, 35-54. New York and London: Routledge.
Slow Food, www.slowfood.org.uk (accessed 20 August 2011)
Smith, Joe. 2011. In *Culture and Climate Change: Recordings* eds. Robert Butler, Eleanor Margolies, Joe Smith and Renata Tyszczuk
https://docs.google.com/viewer?a=v&pid=explorer&chrome=true&srcid=0B8fHkqZ4bCVFNzMyYWI1YzctM (accessed 5 February 2012)

Taylor, P. 2011 Greenland: National Theatre, http://www.independent.co.uk/arts-entertainment/theatre-dance/reviews/greenland-national-theatre-lyttelton-london-2202512.html accessed 2 January 2012
Teamey, K. (in press) Thinking with and beyond *Fields of Green. Environmental Education Research*. 18.
Wals, Arjen. (ed.) 2007. *Social learning towards a sustainable world*. Wageningen, The Netherlands: Wageningen Academic Publishers.

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[1] The term 'Climategate' was the short hand reference applied by journalists to the hacking and circulation of emails held by the Climatic Research Unit (University of East Anglia, UK) in 2009. Climate sceptics claimed the emails showed a manipulation of data. A review led by Sir Muir Russell found no evidence of scientific misconduct.

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[2] This article only references a few of the recent 'climate change' plays. For a comprehensive list of related UK productions, particularly from the 1980s onwards, see: http://www.ashdendirectory.org.uk/directory.asp?searchTerm=allProductions. We name a range of productions and companies towards the end of this article. Most of these are also to be found in the Ashden Directory's deeply informative list.

[3] There is more to be written on this subject. One area for debate is the role of 'labelling' these plays as environmental. It is perhaps those who observe (critics, award-givers) who have tried to make more of environmental matters in some of these productions than the companies and writers. Another is the repetition of character types: sold-out scientist (*Water*; *Earthquakes*), young and frustrated climate change campaigner (*Water; Greenland*; *The Heretic*); eccentric scientist (*Greenland; Earthquakes*). There is simplification here. As one reviewer put it, are these plays avoiding asking hard questions of their audiences? http://www.whatsonstage.com/reviews/theatre/london/E8831296826827/Water.html (accessed 2.1.11)

[4] See www.performancefootprint.co.uk for details.

[5] For detailed notes of these fascinating inputs, see an early section of Dee's blog: http://performancefootprint.co.uk/2011/02/the-scottish-weekend-one-account-dee-heddon/

[6]. See 'Cove Tour' on www.covepark.org (accessed 20 September 2011)

[7] See Wallace Heim's engagement with the idea of improvisation, read through *phronesis*, a mode of practical reasoning (2003, 195).

[8] This is not to be confused with Hulme's description of upper case and lower case climate change (2009: 327-328) which was not known to us at the time of Cove Park. This serves a different purpose to Sally's intention of the formal, public, large-scale and the informal, private and small-scale.

[9] There is not space in this introductory article to argue a case for the strengths of all these pieces seen, particularly in comparison to the mainstream theatre discussed earlier. We leave something of these debates to the articles that follow.

[10] http://labofii.net/

[11] http://www.juliesbicycle.com/

[12] See http://www.juliesbicycle.com/resources/green-guides/green-theatre-guide