



# LANDING STAGES

**SELECTIONS FROM  
THE ASHDEN DIRECTORY**

Edited by Wallace Heim & Eleanor Margolies

The Gathering/Yr Helfa • 2071 • Calling Tree • Gaia Theory • Out of Water • Lungs • Seven Missed Meals Leads to Anarchy • The Villains, the Vote and the Black, Black Oil • Hunger for Trade • Red Forest • Antarctica • Red Sun • How the Whale Became • The Three Peaks • 3,000 Trees: The Death of Mr William MacRae • Grace and the Sea • John Muir: Rhapsody in Green • The Horses • The Elephantom • Protest Song • Trailer Park Plays • re: Fujisan • Guinea Pigs on Trial • Mates • Homme | Animal • Invisible Giant • Kes • Gorilla • Rats • Spectrum • We Have Fallen • Awkward Conversations with Animals I've F\*cked • Riding with the Night • Tiger • A Walk at the Edge of the World • Misa Lisin • RIVERRUN • SOS – Save Our Spaces • The Worm – An Underground Adventure • Song of the Earth • Electric Cars Are Rubbish. Aren't They? • Aurora • In This Place • Cheese • Storm in a Flower Vase • Volcano • Dark Earth • Island Drift • Ours Was The Fen Country • Trans-Plantable Living Room • On Behalf of Nature • Southbanquet • How to Occupy an Oil Rig • Leaving Planet Earth • Darkside • Wildernest at the Beach House • Tidemark • Road Rage • Famous Five Birds • The Exception and the Rule • For Their Own Good • Gardening: For the Unfulfilled and Alienated • The Ants • Dinner is Swerved • Hunt & Darton Cafe • The Cherry Orchard • Hope Light and Nowhere • Island State • Mammoth • Newton • The Smallest Light • Feral • Goodbye Sun and Bear • The Gypsybird Speaks • The Medicine Showdown • Pigmalion Zoo • Economy of Thought • Small Steps in Random Directions • The Wolf and the North Wind: A Contest in the Sky • You Should Ask Wallace • Blue Lotus: Summer • Death and Gardening • Greed • Sacred Earth • Last Land and Il gioco del gregge di capre • 1,000 Suns • The Garden • This Side of Paradise • Pastoral • Smallholding • The Last Wild • Adventure Capitalism • If Room Enough • Oil City • In the Beginning was the End • Moby Dick • Audible Forces • Above Me The Wide Blue Sky • Give Me Back My Broken Night • A Life of Galileo • I Could Read the Sky • TERMINAL: A Miracle Play with Popular Music from the End of the World • Tales from the Taiga • I Love You But We Only Have Fourteen Minutes to Save the Earth • The Long Life & Great Good Fortune of John Clare • The Dark Earth and the Light Sky • Tate à Tate • The Roadless Trip • NORTHALA • GreenandPleasantLand • The Nightingale • EP\_INHALING/EXHALING • Angus Weaver of Grass • Ghost Bird • Lifeguard • Noye's Fludde • After the Rainfall • Allotment • Birds on a Wire • The Day the Sky Turned Black • Eat \$h\*: How Our Waste Can Save the World • Fukushima: A Silent Prayer of Poetry • Going Green the Wong Way • King Lear • How to Climb Mount Everest • The Mermaid of Zennor • Quick! Save the Pizza • Reynard • Cadillac • Solve • Swamp Juice • US Beef • A Midsummer Night's Dream • A Modern Town • NOLA • On the Edge • One Minute Birdwatching • Plastic Beach • Sealand • The Softening of MAO-A • Swordy Well • Thin Ice • High North Movement • The Whale Tale • Wotjek the Bear • The Yarn • Enter the Woods • Machines for Living • My Plaice/The Lake • The Shaman's Dream • Undercovered • Jishin • The Apple Fair • Speed of Light • Ark-ive • Ten Billion • Stand Up Diggers All • A Funeral for the Caspian Tiger • The Just Price of Flowers • NOWHEREISLAND • The Last Polar Bears • The Walk from the Garden • Crow • The Last Lunch • 26 and 7 Bones – the 'and' of the hand • The Fisherman and the Mermaid • Climate Week: Play in a Day • The Way of

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# **LANDING STAGES**

Selections from the  
Ashden Directory of Environment and Performance  
2000 – 2014

Edited by Wallace Heim and Eleanor Margolies

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*Landing Stages: Selections from the Ashden Directory of Environment and Performance 2000-2014*

Edited by Wallace Heim and Eleanor Margolies

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## Introduction

Twenty years ago, the combination of performance and ecology might have seemed an odd coupling. But artists and theatre-makers were making the connections, often working away from the mainstream, creating productions about energy, waste, animals, rivers, forests, places and politics. They worked in theatres and on the land; they walked city streets, made celebrations and invented rituals. There were numerous scattered productions, but did they constitute an emerging field of work? And how might more work be encouraged?

In the late 1990s, the Ashden Trust commissioned Wallace Heim to survey British artists working in these areas. Her research suggested that a website documenting these productions could serve as a directory, to put artists in touch with environmentalists and researchers and support what seemed like a new and undervalued field. The Ashden Directory was launched in 2000. It was edited by Robert Butler and Wallace Heim, with Kellie Gutman joining as co-editor in 2006.

Over the next 14 years, the editors built the first and most comprehensive database of productions and of theatre companies working on environmental themes, listing over 700 productions. A timeline linked environmental events and political landmarks to developments in art and theatre. The editors conducted interviews, held debates, commissioned essays, journals and films, as well as reported news. In 2008, Robert started Ashdenizen, the companion blog to the Directory, offering commentary on how the performing arts and wider cultural themes related to climate change.

Since the Directory began, the field of 'environment and performance' has expanded, with many more organisations, websites and productions contributing to it. The Directory can no longer hope to be comprehensive. The political and cultural contexts have also changed. Practitioners, critics and audiences now communicate with each other through a multiplicity of platforms. These transitions call for new responses and new ways of supporting this field, and so the editors have decided to archive both the Ashden Directory and Ashdenizen. They will remain online, but not be updated.

*Landing Stages* offers a selection from both sites. The Essays section shows the rich variety of subject matter covered by the Directory, ranging from improvising music with birds, to revisiting the theatrical canon; from listening to an opera while walking through the City of London, to celebrating the conviviality of food. The voices of artists and activists come through in the Interviews and Journals. The Projects that the Directory initiated were intended to provoke new thinking: asking artists what they would change about theatre-making in a time of climate instability; considering how flowers work on

stage; and generating new metaphors for sustainability. And in the last section of the book, postings from the blog are set against the timeline from the Directory, starting with Henrik Ibsen's play *An Enemy of the People* and tracing the rapid movement of ideas and events in recent years.

Three new essays introduce the selection: Wallace Heim describes the history of the Directory and looks ahead to new possibilities for supporting performance and ecology, Bradon Smith considers how theatre has met the challenges of climate change and Meghan Moe Beitiks charts her progress as an ecological performance artist alongside the work of the Directory.

The purpose of the Directory was to stimulate a conversation. It started with just a handful of productions. The inside covers of this book list the titles of hundreds of productions that have since been included on the Directory, in appreciation of the work of the artists who have created this field.

Wallace Heim  
Eleanor Margolies

Editors, *Landing Stages*  
October 2014

# THE ASHDEN DIRECTORY: THREE NEW PERSPECTIVES

## The continuing lure of ecological performance

Wallace Heim

Wallace Heim co-edited the Ashden Directory alongside her academic research on performance and ecology. Here, she discusses the beginnings of the Directory and the intentions behind it, looking ahead to new ways to support this expanding field of work.

It started with conversations. A group of activist-artists talked with me about rivers and energy in a damp London basement. Down a Norfolk lane, around a farmhouse kitchen table, I talked with artists and makers about puppets, land use and butterflies. In an Edinburgh tenement, windows rattling against the wind, a director told me about shows on recycling fashion and the billowing street waste of crisp packets. In a sun-bleached quarry in Cornwall, we talked about pilchards and tin and the sound of performing outdoors.

These conversations were set in motion by a chance meeting in 1997 between Robert Butler and myself finding out that we were both compelled by what theatre could do when it turned its forces towards the themes of environmentalism. From that meeting, the Ashden Trust asked me to research what was happening, who was making work, where, how, and what were their ideas and motivations. From those first exploratory meetings with artists around the country, we found people making performance with skill, foresight and commitment to a conjoined theatre and environmentalism. But they were marginal to mainstream notice, and often not noticed even in their own neighbourhoods.

The Ashden Directory began as an experiment in thinking 'as if'. What if we assumed that these scattered, and intensely dedicated artists were just the beginning, the first signs of a much bigger field of work that would develop – because the inevitability and the strength of theatre to deal with environmental themes was undoubtable. What could we do that would support that field of work, as if it was already happening?

The intention was to look in several directions: towards the artists and their productions, towards the audiences of people directly concerned with environmental issues and towards the wider public audiences. Providing a list of these artists and their productions would show that there was a field, and might draw more artists to the subjects of ecology. The interviews, features and news page would show the field's importance and liveliness.

Over the next few years, we set up a trial website, leading to the present site going live in 2000 with a database of productions, links, news, a timeline and interviews. Few of the companies we first listed had websites, and it felt as though we were moving into a new zone of communication, providing digital information about the live, immediate



experience of performed works. Our motivations included, of course, endorsing the possibilities for performance to change people's perceptions of what it means to be human and interdependent with environments and with nature, with the other-than-human. It would take not just one work, but a field of work, recognised and supported widely, to approach the threshold at which cultural and social change happens. The Directory did not propose to be a critical forum, but a way in to the artworks and ideas.

We learned quickly that whatever this field of performance and ecology was, it would not be categorically recognisable; it was not a species or a genre. Inventive and affecting work was happening outside conventional script-based, building-based theatre, as artists were walking, eating, dancing, holding conversations, working in small rooms and wide landscapes, melding the work of art and activism, and incorporating performance practice into practical projects, like gardening and energy production. Both the aesthetic influences and the views about ecology were just as variable. Audiences were offered rehearsals of emergencies, middle-aged couples in lifeboats, refrigerators in cathedrals, civic feasts on an autumn night, testimonies from an oil-spoiled Gulf of Mexico, a black woman stepping onto white Antarctica, wolves bursting from the walls, ministers dropping their trousers and the last grey squirrel leaving with a kiss.

This is a family with resemblances, always changing, with its borders hazy and continually porous to other kinds of art-making and other sources of knowledge and experience. Its vitality depends on its not being readily categorised and on its more subversive meanders across disciplines and art-forms.

The Directory did have a bias towards theatre. This raised expectations that London's mainstream theatres would grab onto the politics, conflicts and psychologies of environmental change and contribute to this thriving diversity. It seemed so obvious, but proved so vexed. The flurry of mainstream productions in 2010 and 2011 exposed the presuppositions of theatre conventions most sharply. The complexities of human relations with environments and with the climate means overturning the historical weight of the imperturbable, tacit habit that the human subject and its actions among other humans are theatre's sole interest. Other suppositions also showed their operation: that the environment or ecology was too materially 'real' for theatre, confounding the usual, more comforting combinations of reality and fiction; and that the conflicts and conditions were too stark to be shown onstage except as represented by activism or science.

Theatre is changing. It always has, in response to new technologies and to new views of what constitutes the human. And it will change because it must. Meanwhile, the impetus continues to understand how performance – in all its variations – offers particular kinds of experience and knowledge about human relations with nature, with ecologies. How can performance not just represent activities from other spheres

of life or rearrange those existing languages, but how can it create new languages and experiences, whether unsettling, bridging or caring.

The Ashden Directory offered one slice at this, appropriate for its time. There is more to be done in the work of attending to this field.

This disparate family warrants and needs more critical attention. This attention is largely found in academia, but not freely online for practitioners, concerned thinkers and audiences. Many open-access sites that publish essays and critiques of art, activism and social practice include contributions looking at the ecological dimensions of works. But there is the opportunity for more directed critiques on ecology and performance, whether through sites and publications dedicated to the field or through articles that place this work in other contexts. New forms of critical writing may be needed as well.

Current discourses on the value of ecosystems and of the arts tend to define 'value' as the measureable economic benefit of services provided or as financial profit. This makes it hard to maintain a focus on the value of the arts as cultural meaning-making and on 'values' as pertaining to social and ecological ethics.

Too, there is no one who is not touched by a changing climate; there are no pockets of society that can exempt themselves as potential audiences. The living relation of performer and audience and subject matter that is the pulse of performance is its strength; expanding audiences is not merely about numbers, but a call to develop new forms of ecological performance.

How members of this disparate family communicate with each other is changing, with new technologies serving new ends. What is needed may be something more than networking, information and opinion, but it is not easy to balance support and critique, conviviality and analysis. Conferences, journeys and workshops have considerable effect, and further experimentations in how to come together to talk and learn could intensify the exchanges.

There is scope within art schools and universities for students and practitioners to develop new methods for devising work that experiment with new art-forms and engage with current shifts in ecological thought, making ecological performance more widely enticing, whether addressing specific ecological themes or interleaving the ecological with other kinds of ideas.

The conditions for ecological performance include the economic. If funders and production companies cannot recognise the ecological as a viable category with enormous social importance, then the support for the development of works is haphazard. There is increasing, and welcome, support for reducing the material effects of productions, but that has yet to be matched by an understanding on the part of funding bodies for the necessary work of developing the ideas, the dramaturgies, the content and reach of productions and projects. Ecological themes may be difficult to identify and categorise. They may be

embedded in a production that appears to have no overt environmental themes, and be more successful for it. Identifying the ecological means not seeing it as environmentalism in another guise, but as itself, as performance and ecology mutually engaged.

The idea of the human, what constitutes the human, is changing as ecological realities take hold. This means that now is an exceptional time to be making performance, that special art-form that happens in the intense, immediate relations between humans, and in the fluid realm between belief and disbelief. The hunger continues for theatre to be that cultural place where one goes to delve into the deep recesses of human sensibilities and emotions about a future that may be irreconcilable with what one could bear. It is a territory requiring many avenues of intelligence, imagination, conflict and consent. It is a place of doubt and delight. The hunger for a theatre where one goes to be shocked or to understand, where one goes to wrestle with the future and to do this collectively, remains strong.

## Love, loss and rethinking our place in the world: climate change in performance

Bradon Smith

Bradon Smith's background is in English literature, with doctoral research on popular science writing. He is currently a researcher on the Stories of Change project (Open University/University of Bath). Here, he discusses recent theatrical work about environmental change.

In 2005, the Ashden Directory convened a round table to discuss the question, 'Why are there no plays about climate change?' Eight years later, TippingPoint gathered a group to discuss the successes and failures of the climate change plays produced since then. The Ashden Directory and blog have documented the rapid change from a time when very few plays were to be found on the topic of climate change, through the first mainstream examples, to the relative glut in recent years. One only needs to look at the Ashden Directory timeline and compare, say, the entries for 2004 (three entries) and 2010 (42 entries), to see that a lot has changed and very quickly. It is now tricky simply to keep up to date with the activity around performance and climate change.

When in 2006 I co-founded (with Benjamin Morris) the Cultures of Climate Change seminar series at the Centre for Research in the Arts, Social Sciences and Humanities (CRASSH) in Cambridge, it was with the notion that there were too few fora for the discussion of climate change from the perspective of the arts and humanities, particularly with regards to the arts, writing and performance. We invited installation artists, photographers, novelists, sound artists and poets to speak about their engagement with environmental change, as well as academics who saw the importance of cultural work in this area. We soon discovered that the Ashden Directory had been carefully charting the wider territory concerning performance and ecology, and we were delighted to organise an event with critic Robert Butler and playwright Steve Waters in 2009 to discuss his recent double-bill of plays, *The Contingency Plan* (see 'It all started with James Lovelock...' page 38).

The success of *The Contingency Plan* is partly in taking climate change as a given, only 'smuggling' in the science where necessary, and putting human drama at its heart: its emotional power comes from imagining the loss of life that results from a flood that we never see but only hear, and a son realising he has lost his parents. Similarly, the most affecting moment of the generally ineffectual *Greenland* (National Theatre, 2011)

is not when it harangues us about our shopping habits, or tries to depict the chaos of international climate negotiations, but rather when a man finds beauty in guillemots wheeling in the Arctic sky overhead, the loss of their habitat and their depleted population mere implications hanging in the air.

The question of exactly what it is about climate change that should cause us concern is an under-interrogated one; there are many possible answers. But theatrical work that has concentrated on climate science, on climate politics, or climate activism has generally failed to ask this question, and has been poorer as a result. The plays that have been most successful have realised that many of the answers centre on loss – of human life, of biodiversity, of species, of our own species, of comfortable fossil fuel-reliant lives, of future generations. Many plays have found in parent-child relationships a way to evoke the sense of responsibility for the future that is also central to our concern about climate change.

Loss, grief, family: the successful moments of climate change theatre have shown that the dramatic issues around climate change are the same as have found expression in plays for two millennia. Perhaps this is why it is possible to argue that performance art and theatrical works that are ‘about’ climate change may not be the most effective works at addressing climate change; such an explicit focus may even be a hindrance. Commentators on the Ashden Directory and elsewhere have argued that the best plays about climate change, once we choose to see them in that way, may be the *Faust* plays, or the *Oresteia*, or Isherwood’s *Goodbye to Berlin* or Brecht’s *Life of Galileo*. In these classic plays we find themes with relevance to our present environmental concerns: *Faust* depicts the power of greed at all costs; the *Oresteia* and *Goodbye to Berlin* both reveal, in plays separated by 2,500 years, our inability to see a coming disaster, and a tendency to ignore even the clearest warnings; and Brecht shows us our deep resistance to rethinking our place in the world.

Similarly, the Ashden Directory has shown how we can reimagine and reinterpret plays by Chekhov or Ibsen in the light of our changing climate. Chekhov, certainly, has also been an influence for dramatists writing about climate change. Mike Bartlett would appear to have been influenced by Chekhov when writing *Earthquakes in London* (National Theatre, 2010), in the three sisters in that play, and in a desire to depict the changes taking place in one family against the backdrop of larger social change. The influence of Chekhov can also be discerned in Steve Waters’ *On the Beach*: the end of that play, as Rob and Jenny resolve to stay in their coastal home even as the storm gathers, would have us recall *The Cherry Orchard*, even were Waters not to have chosen a line from Chekhov’s play as an epigraph for his own play-text.

But if the human drama of climate change is familiar, its epistemological implications are not. Just as each staging of Brecht’s *Galileo* is a performance, so too was Galileo Galilei standing before the inquisition; and it was a performance that ushered in a new knowledge,

and a new set of implications, with far-reaching social effects. Just over 150 years ago, we began another intellectual transition. Presented with Darwin’s careful evidence, his contemporaries could not ignore the theory of evolution. It challenged us with a new idea of our position in the natural world, one that was deeply troubling to many people. *The Origin of Species* is the cornerstone of that intellectual shift, but the reaction to Darwin’s theory was played out in public: in reviews and letters in periodicals and newspapers, in debates, such as the confrontation between Samuel Wilberforce and Joseph Hooker in Oxford in 1860, and – as Gillian Beer showed (*Darwin’s Plots*, 1983) – in the novels of George Eliot, Thomas Hardy, and other contemporary novelists.

Climate change is just such an intellectual transition – as with the structure of our solar system or the process of speciation, it is a knowledge that originates in, but is not confined to our physical world. It is also a social, cultural and ethical complex. But whereas those previous revolutions ‘de-centred’ humanity, showing us not to be at the hub either of our celestial world, or of terrestrial creation, the widespread recognition of anthropogenic climate change reveals the extent of our influence on the planet. It also demands that we acknowledge the consequences of our actions, across generations, and across international borders; it gives a new ethical dimension to everyday behaviours; and it complicates our relationship with energy, which is the foundation on which we have built so much of our society. Climate change is also epistemological change: it brings us face-to-face with a new – and troubling – picture of our place in the world. Just like Galileo did, and Darwin after him.

Theatre can help us negotiate these changes. But it has to do more than simply avail us of the facts. There was much critical acclaim for *Ten Billion*, a recent play-lecture at the Royal Court in which scientist Stephen Emmott explained some of the facts about climate change. But, as Wallace Heim pointed out on the Ashdenizen blog on 7 December 2012 (see page 197), although it presents us with knowledge about climate change, *Ten Billion* does not give us the intellectual means to cope with it. In other words, Brecht’s *Galileo* may be a better play for thinking about climate change than one like *Ten Billion* that takes it as an explicit subject.

This discussion serves to illustrate how much has changed. Ten years ago, it was important to ask why there was such a lack (more accurately, scarcity) of cultural production around climate change; just as it was important to encourage writers, artists and other cultural producers to engage with the issues, and give them access to the knowledge or experiences to facilitate new work. Organisations like TippingPoint, Cape Farewell and the Ashden Directory were at the forefront of this. But already we need to refocus our attention in the young field of culture and climate change.

There is now a growing body of this cultural work, and while we must keep encouraging cultural attention to climate change, there is also a need to critically evaluate the

success of the work that has been produced. But what would ‘success’ mean, here? For some, it might mean changing attitudes or even behaviour in its audience; but this is not, I think, a helpful approach. Not only because it may lead to didactic work, but because climate change is a difficult question with no coherent ‘answer’. Instead, theatre and performance art can show us how climate change relates to age-old themes of love, loss and family; but also ask us the difficult question of how we rethink our place in the world in the light of it.

Regardless of the standard by which we judge new cultural work engaging with the environment, a critical overview of what has already been produced is essential. This overview is even more important for performance than it is for other forms of culture, since performance is ephemeral and fleeting. Even a play-text gives access to only a small part of a performance, and for the larger proportion of theatrical works, dance and performance art, not even this record remains. So that whereas the body of novels covering environmental issues remains an accessible corpus of cultural work, for example, the same cannot be said of performance art with an ecological focus. Some form of documentation, collation, criticism and mediation is required; the Ashden Directory was ahead of its time in realising the need for this, and we can only hope that others pick up the baton.

## A personal timeline of performance and ecology

Meghan Moe Beitiks

Artist Meghan Moe Beitiks trained in theatre and performance art. Her work in Europe and North America has also encompassed forms of activism. Here, she discusses the changes in her work over recent years in relation to the Ashden Directory.

The Ashden Directory’s timeline was used to put art and climate in context. This timeline puts my work and perspectives on the field of performance and ecology in the context of the Ashden Directory.

In 2008, I was obsessed with the concept of bioremediative performance – artwork that seeks to practically restore ecologies. I had just begun volunteering as the blogger for [greenmuseum.org](http://greenmuseum.org) when Wallace Heim curated an online exhibition called ‘enter change’ for that website. It was an entry point for me into the practices of groups such as Critical Art Ensemble and Platform, and the memes at play in performance and ecology. The exhibition led me on to the Ashden Directory, and further discussions in performance and ecology.

At the time, [greenmuseum.org](http://greenmuseum.org) and the Ashden Directory were among the few places online to engage in deeper dialogue with environmental art. Mike Lawler’s EcoTheater Blog had been going strong for some time. The Center for Sustainable Practice in the Arts (CSPA) was just emerging. As a developing performing arts professional, I had spent years studying theatre in Eastern Europe and California, working as a technician in various venues and museums. Pulled by a cultural imperative to address sustainability, I took a detour in the early 2000s to work as a farmer and gardener and tour across America with an activist biodiesel bus. It was exciting and empowering to discover that conversations that were important to me were happening on the other side of the globe in the United Kingdom.

In 2009, the editors of the Ashden Directory had a fantastic presence at the Earth Matters on Stage Conference, held at the University of Oregon and organized by Theresa May. They prepared a video which included a ‘round robin’ of questions between Dan Gretton, Clare Patey, João André da Rocha, Paul Heritage and Mojisola Adebayo (see ‘Asking difficult questions’, page 52). Watching the video again recently, it strikes me that after four years the questions are still very relevant. How much is art worth the damage? How do we reunite culture and agriculture? Can you talk about slowing down?

In the video, Wallace discusses listening. Listening not only to each other but to other non-human entities. She describes the act of listening to a river as different from, but as essential as, listening between humans.

The notion of listening also emerges in Jane Bennett's book *Vibrant Matter*. Bennett writes that we need 'to devise new procedures, technologies, and regimes of perception that enable us to consult non-humans more closely, or to listen and respond more carefully to their outbreaks, objections, testimonies, and propositions. For these offerings are profoundly important to the health of the political ecologies to which we belong' (*Vibrant Matter*, page 108).

In my practice, I began working through these ideas of meaning and listening through a redefinition of form – through how I engaged with form. It wasn't enough anymore to make work *about* sustainability and ecology – I wanted the work to begin performing *with* ecologies.

In 2010, I explored form in my work by creating small site-specific actions: dragging a suitcase of 'clean' soil around an abandoned and polluted train station, having a 'water fight' with a prickly pear cactus. My own performance work evolved in response to my environment, and the kind of dialogue I wanted to see in the cultural sphere.

As I explored these concepts, Robert Butler and other bloggers on Ashdenizen provided key critical perspectives. In an artistic field that can have a clear ethical imperative, rigorous aesthetic dialogue can often get lost in questions of green vs. not green, climate-centric versus not. What Ashdenizen provided was not only a look at representations of nature in culture, but a sense of aesthetic critique combined with a view towards ecological impact. The blog also created a sense of urgency, and continually asked 'why?' Why isn't climate change more widely addressed? Why are we so slow to respond to its needs?

In 2011, keeping in touch with the dialogues of the Ashden Directory had helped me to articulate the intentions of my own practice, but also to place it within a wider field. When I attended the Art and Environment conference at the Nevada Museum of Art, I was familiar, via the Ashden Directory, with the work of artists such as Helen Mayer and Newton Harrison and Amy Franceschini, and able to articulate an unintentional relationship that their work had to performance. There were whole aspects of many environmental works in which action, framed as art, was key. The act of planting a food crop. The act of pushing a uniquely designed wheelbarrow. The telling of stories through audio recordings. These elements of performance were necessary to the works being created but were not being recognised as performance. Reading the Ashden Directory had given me a critical understanding of performance as a wider field.

The 'ecology' of the dialogue around and within environmental art evolved: Mike Lawler retired his blog, Cultura21 had emerged. Greenmuseum.org became inactive and the RSA's Arts+Ecology programme and website closed. In Britain, TippingPoint had started. The COP15 United Nations talks on Climate Change in Copenhagen were a turning point: there was a veritable explosion of climate-related art onsite.

By the time I started examining formal study of performance and ecology, the University of New Mexico had developed an 'Arts and Ecology' MFA, and Social Practice MFAs were springing up at California College of the Arts and at Portland State University. The Arts and Ecology MA at Dartington College of Arts moved to University College Falmouth, where Daro Montag runs the Art and Environment course and Research in Art, Nature and Environment (RANE). In the cultural war against climate change, it feels like these are the environments of fortresses.

In 2013, I graduated from the School of the Art Institute of Chicago's Performance Art MFA program. I had chosen the school because I knew ecological dialogue was present, and in a way that I could connect directly to performance. My thesis was entitled 'A Lab for Apologies and Forgiveness v.3'. With my collaborator Sarah Knutson, I attempted to create a dialogue between radioactive waste, Hollywood movies, and the bacteria *Geobacter sulfurreducens*, which feeds on radioactive uranium. My understandings of listening and meaning evolved from a prompt within a Directory video to a full-blown conceptual framework, informed by *Vibrant Matter* and Karen Barad's concept of 'Intra-Action'. Upon graduating, I was awarded the Clare Rosen and Samuel Edes Foundation Prize for Emerging Artists, which is allowing me, among other things, the means to attempt to perform with a bacteria.

Culturally, climate change is now described as a terminal disease, one for which it's unclear whether there's a cure. Carbon dioxide levels in the atmosphere remain at high levels, global temperatures and sea levels continue to rise. The Ashden Directory's archiving, I think, also reflects a shift in a particular cultural relationship with climate change, that of a coming crisis that requires a targeted response. With the recent 'People, Profit, Planet' stream curated by Ian Garrett at the 2013 World Stage Design festival, there is a sense of sustainability being acknowledged as an issue in the wider professional field of performance. I do not feel anymore surrounded by a rising up against a coming crisis. The crisis is here, it is not forthcoming or past. Now it is about mitigating damage.

Connectivity is key, both in my creative work and in the field of performance and ecology. Those of us invested in addressing ecological issues through performance often connect through Skype, conferences and events. We need to be able to follow what everyone else is doing, how we are working as field. Addressing climate change on a global scale means we need to connect trans-nationally, whether that's in person at a conference, or through the internet. I can see on a daily basis what is important, relevant and exciting to Brandon Ballengée, Fevered Sleep, Arcola, Julie's Bicycle, Patricia Watts, and Platform based on what shows up in my Facebook feed. Tumblr now performs a blog-and-reader combined function; more than 500 million users communicate in a short-form language via Twitter. CSPA has an excellent feed of most crossovers between art and sustainability.

Engaging in conversation with non-human entities, on a cultural level, is a tactic that can help us to relate to the world differently, and possibly lead to changing perspectives and behaviours. I believe that there is still hope, and that conversations like the ones initiated on the Ashden Directory are an important part of the solution. The field of performance and ecology is small but steadily growing and gaining acceptance. There will be continued need for performance that engages ecological issues, and a global perspective on that engagement.

Without the Ashden Directory, there will not be a developed place for discussion, criticism and theory devoted solely to performance and ecology. Which is a shame, because in my experience, dialogue about the work improves the work. It makes the art beholden to both the art world and the intentions of sustainability: nobody gets off free jumping on a green bandwagon, or going without their personal carbon impact being scrutinized. There will be a continued need for us to stay connected – whether this community evolves online or through another form remains to be seen. But the Ashden Directory has played a key role, along my timeline and the timelines of many others, in creating connections that will evolve past its archiving.

# INTERVIEWS

## How does environmental drama work?

Jonathon Porritt

In 2001, Jonathon Porritt talked with Wallace Heim about the balance between hammering home a message and keeping an audience with you. At the time, he was co-director of Forum for the Future and chair of the Sustainable Development Commission set up by then prime minister, Tony Blair.

**Wallace:** You've tried many approaches to communicating environmental issues: education, activism, writing. You posed the question many years ago, 'Why is there no environmental drama?' Looking at theatre as means of communication, how would you answer that question now?

**Jonathon:** I think a lot of people do veer away from the notion of theatre as a sort of educative experience – 'This is about the environment so you're going to sit there and learn about the ozone layer or rain forest destruction' – or whatever it might be. That type of very preachy approach is extremely unattractive to people. And it doesn't work.

**Wallace:** Why doesn't it work?

**Jonathon:** I once had an amazing discussion with John Boorman who directed a film called *The Emerald Forest*. He's passionate about the environment, and deeply imbued with an understanding of the relationship between humankind and the natural world and lives it in his own life.

For him this film was very precious because it was the first time he'd been able to go after an explicit environmental theme. He said it had been one of the hardest things he'd ever had to do because he found himself all the time using the camera in what would have been seen as a potentially didactic, if not indoctrinating way. He had to coax himself out of this notion of using the medium to communicate in that way.

He found that very hard because all his instincts were pushing him to do that, while he knew if he did, the thing would die aesthetically. There was this tension between the very 'in-your-face' campaigning and the more oblique line that he sometimes took.

There is this line between what you need to put in there to enable people to understand the issues and the trust that you have to have in their ability to interpret and reflect in their own way without actually trying to form their judgements for them.

**Wallace:** Could this also be part of the expectation that environmental ideas are

communicated through documentaries or by activism, and not really appreciating that theatre is something else? You enter an imaginative world. It may be other qualities to our relations to the environment which can be brought out by theatre.

**Jonathon:** Yes, exactly. I feel very strongly that's the power of it – it isn't by forcing things onto people, it is by this lateral approach, very often evocative rather than didactic, that you can make such powerful messages available to people.

**Wallace:** And to touch people in a different way?

**Jonathon:** We tried this when I was at Friends of the Earth. I was Director for nearly seven years from 1984, and one of things I set up was an organisation called TATE, The Arts for The Earth. This was the first time that any environmental organisation had tried to mobilise the arts behind environmental causes and it was as crude as that at one level.

It would be quite a difficult thing to do now, funnily enough. It would jar a bit because there wouldn't be the same convening power around the concept – 'You must do more for the environment' – because everybody knows we must do more for the environment. There's nothing to prove in that respect.

It ran a series of events – poetry readings, art auctions, exhibitions. It did bring in wondrous examples of the more inspirational up-beat side of the environmental world-view which is often lacking. We got TATE going to try and communicate not just the awful despair about collapsing ecosystems but also to remind people of the power of that joyful relationship which is such an important part.

I suppose we were trying to make a much more living connection between artistic expression and 'the environment' – which sometimes comes with a pretty dead hand wrapped around it.

**Wallace:** What, 'the environment'?

**Jonathon:** Yes. It really does. Not a lot of life and not a lot of joy and all the rest of it and so you've got to keep working away at that.

The market research organisation NOP did a wonderful survey. It was an extraordinary thing. They went out into the street – this was quite a long time ago – and they said to people, 'Okay, we're going to say a number of words to you. When you hear these words, do your energy levels go up or do your energy levels go down? Just instant responses – don't think about it.' Then they gave them all these words like 'love' or 'television', and in the middle they stuck in the word 'environment' and the horrible, horrible conclusion of this survey was that for the vast majority of people the mere mention of the word 'environment'

turned their energy levels plummeting downwards. If you're working with that kind of psychological backdrop to promoting solutions to these problems, you're on a hiding to nothing. This is a big issue.

**Wallace:** And a big issue for environmental drama.

**Jonathon:** It really is. A lot of this can disempower as much as empower. You can go along to the most powerful presentation in the world about different environmental issues, and it is quite likely that a lot of people would leave feeling less empowered to do something about it than they were before they went in.

If you rub people's noses too much in the imminent apocalypse model then it's not terribly surprising that many of them leave saying, 'Well, if it's really gone that far, there obviously isn't any point worrying about it and there's certainly nothing I can do and so I shall just carry on as usual.' They don't say it, but that's how they rationalise no change in behaviour.

**Wallace:** There's nothing to engage their emotions? Nothing to make that link between themselves and the world?

**Jonathon:** Exactly.

**Wallace:** For children, their link with the natural world may be different than that of adults. Ted Hughes's view was that watching children acting in a play which is about the environment can then have a very profound impact on the adults.

**Jonathon:** I have a slightly ambivalent view about this. There is something quite instrumental about using children to get after the mind-sets of their parents.

Ted Roszak, who is I think one of the most wonderful visionaries in this area, wrote a book called *The Voice of the Earth* in which he talks about the differences between children and adults. Children he describes as 'permeable membranes', meaning that the sense of separation between the human organism and the surrounding world is not hard and fast.

There often is much more of a sense of engagement, which isn't always positive. It's why sometimes nature can be very frightening for children because there isn't a sense of safety inside a secure zone. Roszak describes this hardening that goes on as children become older and the connections between us and the natural world that weaken as we go. We positively promote the weakening of them by encouraging children to see meaning and fun in practically everywhere else in life other than in nature.

Rozsak explains that unless you're thinking about this explicitly and structuring



educational environments in such a way that you are keeping this 'permeable membrane' open to the totality of life, there will be a closing down process. For many adults, you have to go back, strip out all those layers, separations and barriers between you and the natural world. You have to take them down, you have to dismantle them systematically and reconnect at that level.

He goes on from there to explain that this is what lies at the heart of the sickness of the modern world. Because humans deny their own connectedness with the natural world they are sick. The problem is that we aren't living an honest life because we're denying that very powerful atavistic connection with life on earth.

**Wallace:** Maybe this is something that holds back environmental theatre. The expectation is that the self you see or experience won't be that 'permeable membrane'.

**Jonathon:** Yes, it's very difficult. I don't know whether there's a way of overcoming that, in terms of conventional theatre. We all take with us these expectations, don't we, as we troop into the theatre. We have a sense of what it is that's going to happen. For me, workshops are likely to be more engaging because they don't play so much on – 'We're the actors and you're the audience' – and tend to find ways of bringing people in to share the experiences which helps to break that separation down.

I'm questioning whether watching other people acting out situations and evoking feelings is actually the fastest way to getting another person to develop that direct relationship themselves. I'm just wondering whether it might become another excuse to stop you doing it yourself if you can do it vicariously through people up there in front of you doing it for you. If you said to me, 'Here's x-million pounds to allow the largest number of young people the most powerful and sustainable access to the natural world', I guess I'd put my money there rather than into theatre. That's quite an interesting conclusion to come to. It doesn't work like that anyway. These are not either/ors.

**Wallace:** No, but bringing nature into any subject changes the subject, so it could be that the notions of how theatre is made need to change. There's no reason why nature has to fit theatre.

**Jonathon:** That's true. Yes, that would certainly change the conventional design of the average theatre, wouldn't it?

**Wallace:** Being utopian, if there were communities who had local drama-based environmental projects and experiential works going on as part of everyday life, could that be taken as an 'indicator of sustainability'?

**Jonathon:** That's quite a challenging question. Your utopian model is a classic example of the question of where and how you distinguish between quantifiable outcomes and outcomes which are a change in the behaviour of those people, or an enrichment in the quality of life for those people. We're having a real crack at this with one of the Forum's activities. We worked with a theatre company taking a play into schools. It's a very humorous thing about understanding waste better and where it comes from and seeing that side of things more imaginatively. I went along to one of these performances and I was listening to the children afterwards talking to the company and of course it was great. They were enthusiastic. They clearly enjoyed it. They had fun. This was all written up as a success.

And I said, 'Well, how do we know that?' How do we know that that has actually had any lasting impact on these children at all? There's an act of faith here – that the sheer fun in an experience will lead to more responsible patterns of behaviour.

I know one shouldn't evaluate everything down to the last tiniest little widgeon of empirical proof, but there is a point at which you have to ask, 'Does the act of faith correlate with anything in reality?'

**Wallace:** How do you see that reality, how do you see the evidence for environmental understanding in the broader society?

**Jonathon:** Things are much more open now to all sorts of creative ways of interpreting the environment, far more open than it's ever been before. The same is true in terms of business responses to these agendas and to local government responses. There's been a huge shift – and it's a substantial shift. There's a lot of real questioning going on. It wouldn't surprise me if by the end of my lifetime, the receptivity to the world-view that lies behind environmentalism was broadly universalised across society.

I have a dream in the back of my mind. When I've finished doing all this boring work about consultancy and research and so on, I think there is an opportunity to think about public meetings. I like doing public meetings. I'm beginning to get quite twitchy about being in a rut about all this.

In 30 years, I've tried just about everything in terms of articulating the environment, 'the mission' as it were. I haven't tried the arts and performance yet. There's got to be a few more things I can do before it's over. I'll get there one day.

Part history, part fictional memoir, Jonathon Porritt's book *The World We Made: Alex McKay's Story from 2050* was published in 2013.

## Beginning with the small

Vandana Shiva

Environmental activist, quantum physicist and author, Vandana Shiva talked with Wallace Heim in 2003 about the importance of the arts for biological and cultural diversity. The conversation followed Shiva's lecture at the Natural History Museum, the first in a series organised by the London International Festival of Theatre (LIFT) under the title 'Imagining a Cultural Commons'.

**Wallace:** You have said that the arts and theatre are important to you, although your work is more directed towards activism and education. I'd like to start with your own experience of rituals and celebrations in India and what these have meant to you.

**Vandana:** One of those festivals is Akti, which is done at the beginning of the annual cultivation season. It's theatre in real life. In 1991, I was travelling the country trying to inform farmers, peasant groups and tribal groups about the General Agreement on Trade and Tariffs, which was a new set of international laws that were going to force the patenting of life, including seed.

When I was in a tribal area in central India, one of the tribals mentioned casually that seed can't ever be privately owned. It belongs to a whole community and they reaffirm that every year with Akti. Every family brings their rice to the local divinity in folded leaves called *donas*. Each *dona* is different, and they are all put together and mixed and exchanged. The mixing is both the sharing and also a reminder that isolated rice which is not being exchanged will have disease. It will be prone to pest attacks, it will lose resilience.

The ritual embodies three things in one go. It's a reaffirmation of biodiversity as a common legacy. It's a reaffirmation of the dependence we have on larger forces on this planet, because it's an invocation asking for the rain and nature and the cycles of the weather to co-operate, so that the harvest will be enough to look after the needs of the community. And it's a reaffirmation of ecological balance. The most vibrant rituals are practised in areas that haven't fallen victim to industrial agriculture – which is the end to ritual.

**Wallace:** Here, so many of those renewing seasonal rituals have gone. It's often a case of trying to reinvent that connection again, sometimes by adapting rituals from other cultures. There is criticism now about practitioners using rituals and contemporary work from other cultures in an appropriating way. And there is a larger question as to how, across cultures, artists and theatre practitioners can work together equitably and fairly, especially as so many environmental issues recognise no political boundaries.

**Vandana:** All cultural evolution has taken place through the fertilising of ideas, through cultural forms and imaginative metaphors being taken from across cultures and given a whole new dimension, given a new life. It's a bit like that seed in Akti. If left to itself, one farmer's seed planted every year will eventually degrade. Its renewal comes out of exchange, out of being planted on another field, being looked after by another hand.

I don't think it's the exchange or the borrowings that really make for exploitation. I think it's other things in the framework of relationships between cultures that make for exploitation. We do have a colonial legacy, and we now have globalisation and market-driven contexts in which those who have power can appropriate from those who do not. Those who are in the market can appropriate from those who are in the commons. Exchange isn't the problem. The terms of exchange are the problem. Trade isn't the problem, the terms of trade are the problem. And so we have to sort out the terms rather than try and be insular.

I think fertilising each other's ideas is just wonderful. It's amazing. We've all enriched ourselves through that. The point is one shouldn't try and seek private benefit, cultural power, cultural domination out of that exchange and that needs sensitivity, it needs respect, it needs mutual giving and taking and knowing that you are receiving a gift and you have to carry it through with all the integrity and all the care that it deserves.

**Wallace:** The challenges of speaking across cultures also happen within a society. Many people now are working within corporations and within government or institutional settings, using theatre and the arts to facilitate a change in business and corporate practices in relation with the environment. In your work, what ways have you found of speaking across these divides?

**Vandana:** I think different individuals and different corporations have extremely different behaviour patterns and cultures. There can be extremely large corporations which are still able to respect critical assessment and listen to it with openness. There are others who are so closed that any honest appraisal creates a very vicious lashing out. If a corporation wants to make money at any cost it will not re-evaluate what it's doing no matter what, even if it is costing the earth. But if a corporation thinks yes, it should make profits but it shouldn't unleash ecological destruction, cultural dislocation and displacement, then it will be constantly on the alert to get signals telling it where it is going wrong.

I think the arts are a very, very important avenue for transformation because we're in this strange situation where if you really look at what the World Trade Organisation has meant, it has basically meant there is only one kind of citizen in the world, which is the global corporation, and ordinary citizens and ordinary people are second-class citizens. I don't think there was a thinking that went behind that structure. I think it was just for the

convenience of finding quick markets and the maximisation of the movement of capital.

But the implications of that thinking are cosmological. Its implications are for human rights and how we think of what is a human being, what is a human being for.

Now, there are three levels at which you can start addressing this problem – the problem that the human has been displaced by the non-human, the organisations and corporations have been given a higher status and given all the rights of a human being and no responsibilities of a human being. Firstly, you can do it in the old style politics which doesn't have a richness. It reinforces existing, assumed categories. Secondly, one does need to address the problem in a very accurate form through the work of science, through the counting of figures. In India, for example, that is counting the number of farmer suicides or how many rupees an Indian peasant lost in growing potatoes for export. But that counting is far more directed to not having that pain of the powerless written off, because unfortunately it is the case that the pain of the powerless is disregarded unless it's turned into communication of the dominant system which is figures and graphs.

But, and this is the third level, I still feel that with human transformation, the power to reach deep within to make change, it is the arts and culture which carry that power. And therefore even though I am not an artist and I'm not from theatre, I have a very deep respect for what can be done.

I know that ten books I write are not equal – I am not equal – to the two lines a village poet will create on these issues.

**Wallace:** This brings us to democracy. In the European culture, theatre and representative democracy evolved around the same time. Now, there are artists and theatre practitioners trying to reinvent democracy in very small ways and doing this through creating social spaces, in small events, and in creating public spaces for conversation. I think this work has value not only in what it is telling us about what mainstream theatre isn't doing now, but it's also saying what representational democracy isn't doing right now – which is allowing for those spaces of local, public consensus. Artists, in some ways, are perceiving that need.

**Vandana:** I think that democracy is being reinvented in small places and it is in the nature of growth and in the nature of birth and in the nature of regeneration, to begin with the small. The chestnut tree didn't come as that tree, it came as that little chestnut seed. And you were once an embryo as was I, and as are our future generations. There is sometimes panic when something is not ready-made in its full unfolding of a potential. That's where my own scientific work in quantum theory is constantly helping me to remember that the smallness is not a smallness forever, but smallness embodies an unfolding into largeness.

We are in a time of the silencing of formal democracy, and we can see this in the way that opposition to the war in Iraq is seen as supporting the terrorists – the international

debate has been reduced to that. The informal democracy people are trying to create is in the peace movements which are against both the violence of the terrorists and the violence of military aggression. But there are attempts to criminalise protest and to equate people who call for peace with supporters of terrorist action. The only thing that is available in such periods is to begin with the small, that little corner which nobody notices, which won't be stamped out, and to create the space for democracy, through those tiny imaginations of democracy, in a period of the death of democracy.

I think there are two things that artists are very fully aware of, as are scientists and quantum scientists, which is of the complexity and the uncertainty of the world. It was only for a hundred years that we thought that everything was immutable, everything came as essentially determined for ever, fixed, locked in. It projected that fixedness onto human beings, saying that human beings are designed to be violent, they're designed to be competitive, they're designed to hurt each other, therefore we must have an all-powerful state to control them – without ever thinking that the potential for cooperation as much as the potential for competition is shaped by the context into which human beings are put. Cooperation and competition are the result of social interaction and not our essential nature.

It's potential that matters and potential is in the small. So I really feel that these small spaces where democracy is being reinvented – whether it be through arts and theatre or it be through other alternatives, for example in agriculture – have huge implications because they will unfold into the future. They are shaping history, and already in them are carried the germs of another historical trajectory.

**Wallace:** Practitioners can work in either an urban or a rural sphere, and deal with issues of the local and the global. A seed, GMOs – these are immediate and intimate points of connection between my body, my food and globalisation.

**Vandana:** I've always been a little puzzled by the thinking that allows it to be imagined that the local and the global are separated planes. The local and the global are interactive. The point is which end you begin with and what you privilege. When you privilege the local, the global becomes a system of mutually interacting, mutually respectful autonomous systems – whether that is for food, or for culture, or for the way we govern ourselves. Or, you can privilege the global in which case the global is in every local, but the local is reshaped on the terms of global privilege. That's where global corporations reach the remotest village in India. Subsistence peasants shape their actions on the basis of mythic beliefs. Corporations are using those mythic beliefs as marketing tools – using all our gods and divinities, Guru Nanak in Punjab and Hanuman in south India – to be salesmen for Monsanto. They are transporting subsistence peasants down a track from which they cannot retreat.

So there is no separation. The point is what do you privilege, how do you see the interaction, and again, if you come back to that issue of terms of relationship, there is no separation. The point is – what is the relationship? Will the global extinguish the local in its self-expression and turn it into just zones of colonisation? Or will the global be a formation of the free self-expression of the many locals and create a global linked through humility? We have to leave a space for other species on the planet, other cultures, other regions, other countries, and live in the right way with awareness of what is the space that others are entitled to.

**Wallace:** Theatre practitioners and artists are saying that another world is possible. Are you hopeful that this is happening, that this is possible?

**Vandana:** Yes, I'm very hopeful. An interviewer that I spoke to yesterday, said, 'The big protests are making a difference.' I said, 'You're looking in the wrong place.' The protests aren't supposed to shape the alternative. The alternative begins where people live, where they teach, where they eat. So if you really want to see whether change is being made look at how it begins in the small places.

The point is where does the change begin and I believe the change has begun and it's unfolding. And it carries the future, because that other trajectory, of false advertising and selling hybrid seeds and pesticides with no idea of the consequences, selling false illusions, is a trajectory of self-destruction. This is the way corporations are dealing with the planet. I've called it the suicidal tendency, and it is extinguishing the future.

**Wallace:** I was very struck in your LIFT lecture when you said it's telling the truth that works. That the arts tell a truth but it's different from a scientific truth. There is an experience of a truth that art or ritual or performance can bring, but it may not have that absolute verifiable aspect. I wondered if you'd been moved by the other truths that you've heard people speaking?

**Vandana:** I have been deeply moved by truths that are not verifiable in the scientific way but they are verifiable by human experience. When a play or a painting or a piece of music makes a difference it's because it is, in a way, being verified through the experience that it triggers in others. That experience is then, in some way, reflecting lived experience or the puzzle of not being able to make sense of things. The arts can do that, the arts can explain confusion, lend clarity to it, in deceitful times in which 'public relations' are trying to shape our thinking and our imagination.

I think arts can reveal, arts can tell the truth in a much richer way than science. It is the nature of science to tell the truth a bit at a time. When the first five farmer suicides in India

happened, they said, 'Oh, they were all alcoholics.' And then ten suicides happened, and it was, 'Oh, they were all alcoholics plus adulterers.' Then 20,000 happened, and it was about debt and seeds and chemicals. The lie that this was to do with a personal problem rather than the larger context was exposed.

But whatever it is, through the science, you tell one story at a time. The wonderful thing with art is you can tell many stories at a time. Life is many stories at one time and therefore the truth is richer in the communication and the telling of it in the arts.

**Wallace:** In some ways artists and theatre practitioners need to take risks in communicating the big issues, or in developing a language for expressing the experiences of these issues – the patenting of life, genetic modification of seed, climate change. For much of what is called political theatre here, these issues are outside the areas of interest and we want to encourage people to take risks and address them.

**Vandana:** I've always given so much weight to carving out the small spaces and letting them grow, including in our work, the seed saving. We started with three seed banks now we've established more than 24. You begin with the small, you begin with the do-able, you begin with that which you can do and that which you can do under the most repressive context. And in the doing of it, you make the repression retreat, you change the terms.

Last year *Time* magazine identified ten people who are shaping the future, and they identified me and Navdanya – our movement for conserving biodiversity. And there was a line at the end – and this was *Time* magazine, not the kind of people who would normally touch us with a barge pole – but the last line was, 'and through the work of Navdanya the terms have changed. Instead of traditional seeds and agriculture being judged by the yardstick of biotech, the biotech industry is now to be judged by the yardstick of ecological agriculture.'

But to make that yardstick real, you have to make it happen. To make it happen takes personal commitment. It has to begin with the person, it has to begin at the local. Nurturance for an idea comes from two sources. It comes from partnerships which can make an idea happen, sometimes with small amounts of money which can make an idea grow and find nourishment from other sources. The second thing it really needs is a deep, deep belief that it is possible, that another way is possible. And, because what you bring to life – whether you do it as an artist or you do it as conservationist – is the total function of how much you *believe* it can be done.

Vandana Shiva's recent publications include *Biopiracy: The Plunder of Nature & Knowledge* (2011) and *Making Peace with the Earth* (2013).

## Good art goes beyond ‘the issues’

Siân Ede

As arts director of the Gulbenkian Foundation, Siân Ede pioneered projects bringing artists and scientists together. In 2006, she talked to Wallace Heim about what fires her imagination.

**Wallace:** Why do you think that the ‘science’ in many art-science projects often sidelines the ‘environmental’ sciences, including those that observe the natural world, ecosystems and climate change?

**Siân:** I think that this is to do with the status of environmental science within the science community – or, more explicitly, within the politics of science. There are sexy subjects in science, like in vitro fertilisation or cloning or heart surgery or nano-technology, but environmental science carries with it a whole burden of responsibilities and guilt which makes it problematic for political investment in it.

But this is not to say that artists don’t engage with it. Artists have always engaged with nature particularly since Romanticism. I think we still carry that legacy of Romanticism with us. I was listening to an interview on the radio this morning about the House of Lords opposing wind farming, and thinking, *But there is no pristine nature left!* It is sentimental to believe that our heaths and mountains are ‘natural’. Actually, wind farms are wonderfully aesthetic objects.

Artists turn a lot of ideas on their heads and do not accept an agenda that everything we call ‘nature’ is good. They are very well able to deconstruct what is meant by ‘nature’. Some artists do engage with environmental issues but not necessarily in the usual way. They are interested in the science and they are interested in survival, but we have got to look at nature and new technologies in a realistic and energetic way and not in a sentimental way.

**Wallace:** Most science and art projects involve the visual arts. What have you seen that connects performance and the environment?

**Siân:** There is quite a history to this, to do with Theatre-in-Education. TiE really burgeoned in the 1960s and on into the 80s. TiE had a Marxist-Socialist agenda, but it did deal with environmental issues and enact them in very startling ways. The playwright who wrote the classic of that time was David Holman and his play *Drink the Mercury* in 1972, which was about mercury poisoning around the seas of Japan. It was taken into the classroom. There was a starkness and a boldness about it. The style of performance was quasi-naturalistic.

It also used expressionism and very large gestures. Japan and the American multinational company were represented by characters in masks. It was a bit crude in its way, but that history was of very bold productions and it had a real agenda to it.

I remember a particularly brilliant piece – I think it was by Nottingham Playhouse – about finding oil on a Shetland Island. It lasted the whole day. Children were put in an imaginary plane and told that they were the inhabitants of an island. They were made familiar with the old ways of the island and then some people from an oil company came and said, ‘Good news! We’ve found oil on your islands.’

They did live debate and interaction with the children about whether this was a good thing or not, and of course made everyone see how complicated it was. It would bring jobs, it would bring new facilities and nicer homes for people and at the same time bring environmental problems. The complications and complexities of that issue were wonderfully wrought so that nobody came home saying, ‘I definitely think this, I definitely think that.’ Everyone could see it from both points of view.

I am not in touch with educational theatre, but I am not aware of that kind of bold, stark, ‘Let’s take an issue and really deal with it’ way of working.

**Wallace:** Many of the companies listed on the Ashden Directory do work in schools. How do you think the demands of that work have changed?

**Siân:** My sense is that around 1988, which brought in the new National Curriculum, the whole picture changed. Funding was different, and people started talking about curriculum targets.

The thing that often gets me is that anything worthy and difficult always seems to be dumped onto education. It’s as though they say, ‘One of the most important things we must do about renewable energy or whatever is educate children.’

Yet children are the most powerless people in our society. Then they say, ‘We will educate the children and it will be alright and it will all go away.’ As though schools haven’t got enough to do, without taking on the burden of responsibility and the misery of environmental issues. It seems like a way of hiving things off.

You know there are haughty old men who get up and say, ‘We can educate our children to do this or that.’ No – we must educate you. You are the people with the decision-making powers! You get yourself educated! I feel very strongly about that, dumping on education, asking teachers to take on the problems of the world. It is going to be another 20, 30 years before those children begin to be decision-makers themselves.

There is another thing which I feel very strongly about as arts director here, which is that no art is strictly issue-based. TiE was unashamedly issue-based. That’s what its purpose was. But *King Lear* isn’t about geriatric medicine. It is about hundreds of different things.

I don't go to the theatre because I think – 'Oh, here's a good play which will make me dead miserable about wind farms.' I go because I want the richness of human experience.

The most interesting 'environmental' play is Ibsen's *An Enemy of the People*. It is a brilliant piece of writing that shows the political dilemmas surrounding environmental issues. It is the most fantastic example of somebody standing up for freedom and not looking at the commercial aspects of it. You see how unpopular the hero has to make himself and the effects on his family as a result of that.

**Wallace:** This brings up several important aspects of drama and the environment – and its relation with 'real life'. 'The environment' can come across as just another political issue, and the special significance of it is lost. Or an environmental crisis – like nuclear waste or climate change – can simply be too real, too depressing.

**Siân:** If you had to make a real decision about genetic engineering what would you do? That real-life situation belongs more to the soaps which can take these things on very well and raise the public debate. The American film, *The Day After Tomorrow*, about global warming, is using drama in an obvious way. The next time people read the papers they may be slightly more aware, which is what you want to happen. You want Americans to think: this is the consequence of not signing up to the Kyoto Agreement.

I think the environment does open itself up very well to live debate – and debates are dramatic. The audience can say things which make it even more complicated, and the whole thing makes for a wonderful, exhilarating experience. Call it drama if you like – it's real life, it makes you rethink things. I get my dramatic hits out of real debate and discussion.

The most exciting debate I ever went to was on BSE, a few years ago at the British Association, because it included farmers. There was Richard Lacey, the whistle-blower on the link between BSE and vCJD, and the solicitor for the people who have vCJD on one side and on the other side were farmers. Richard Lacey was saying, 'This is happening and you're not listening to it,' and the farmers were saying, 'No. You are ruining our livelihoods.' It was thrilling and I did feel I was witnessing a piece of drama, really – a piece of live drama.

**Wallace:** As arts director for the Gulbenkian Foundation, you're able to observe the directions new works are taking, and also to influence those directions through funding policy and criteria. Where do you see science and art going now?

**Siân:** When I was on the Science on Stage and Screen committee at the Wellcome Trust we got I can't remember how many plays with the title *Hello, hello, hello, Dolly, Dolly, Dolly*. They were all really dreadful plays about cloning. Nothing had broken boundaries.

This brings up the question of quality. I think this is the key issue. When people write to me with an application and say, 'We're writing a play to change the world and these are the issues,' I say, 'Well, who's going to disagree with that? But are you any good?'

I'm only interested in funding good art. I'm much more likely to ask, 'So who's your playwright? What's her track record? Is she any good?' Because it's absolutely hopeless unless you get a good writer. And then of course a good writer will say, 'I don't write plays about a specific issue.'

**Wallace:** How do you think of the environment?

**Siân:** It's terribly important to me. Because I was brought up in the countryside, I've seen it all change a lot. But I am also very anti-sentimentalist. The opening of the chapter on art and the environment in my new book *Art and Science* begins with that Thomas Hardy poem – 'In Time of "The Breaking of Nations"' – and he says, 'only a man harrowing clods', and so on, 'will go onward the same'. And I say he was wrong. He was saying our simple agrarian life is going to go on forever. Well, it stopped. All over the world. It stopped. There is no maid and her wight whispering by, and no thin smoke without flame. There are monocultures. There are new slaves working in global industries, the forests are being cleared. But that agrarian idyll is still in our imagination, it still has an effect. It is locked into our culture, into the world's cultures.

My two daughters were brought up in London and they don't feel the same way about nature as I do. They are environmental politically – but they don't have the same sense of its wildness. They haven't got that memory that I carry with me, from my parents and grandparents. I can name hundreds of wild plants because that's how I was brought up. You have to relearn that now. But I also see myself as modern. You have to accommodate tourism and jobs now in a way that doesn't destroy the environment.

[Siân Ede edited and contributed to \*Strange and Charmed: Science and the Contemporary Visual Arts\* \(2000\) and is the author of \*Art and Science\* \(2005\).](#)

## Discovering the comedy of survival

Richard Mabey

Writer and naturalist Richard Mabey spoke to Eleanor Margolies in 2006 about what he reads, and about how a production of *A Midsummer Night's Dream* revealed the links between the art of comedy and survival in the natural world.

Theatre wasn't particularly interesting to me until an extraordinary occasion in 2005, when I was invited to help with the Royal Shakespeare Company's production of *A Midsummer Night's Dream*, directed by Gregory Doran. He roped me in to make a film about natural symbolism and I also wrote a programme note for the production. Seen through Greg's eyes, Shakespeare suddenly opened itself to me. It was a complete revelation.

The play – in the sense of playing – was as important as the content. What mattered was the play between people – and that was in everything that was happening on stage.

I think I understood theatre in Joseph Meeker's terms properly for the very first time. I'm a great believer in play. I basically go along with Meeker's idea – as I described it in *Nature Cure* – that play is the purpose of life.

Joseph Meeker's book *The Comedy of Survival* (1974) is about a metaphorical resonance between survival in the natural world, and survival in literary comedy. The comic way is about durability, survival, reconciliation and, above all, play. It was a huge experience to be involved with that production, and it helped me understand something important about myth and theatre.

However, there is a problem with myth. It's a question that arises for all of us who write about the natural world or make glamorous films about remote parts of the world. As I discuss in *Fencing Paradise*, myth is fundamentally very valuable. It's the way that humans get to grips with the world, with the imponderables. But it can replace the real world. In a sense, myth is the progenitor of virtual reality. Watching David Attenborough's *Planet Earth*, I wondered: do we really know whether the animals shown are real? Would it matter if they were simulations? Would anyone mind?

It's a problem for a writer, too. By writing, you can pick something out and make it seem more important than it is. It is a challenge: for the writing to be important and vivid and yet not push the subject into oblivion by becoming a substitute for it. I have no answer to the problem – no answer except hard thinking and watching.

There is one kind of answer in John Clare's poetry. The poems have a great quality of evocation. You would never read a Clare poem instead of going outside; it makes you want to experience the real thing.

I've talked to the poet Kathleen Jamie about this quality, about how writers can let the things they write about shine through. The term she uses is 'transparency'. In contrast, the great failing of wildlife television is its refusal to admit the existence of the hidden. One doesn't have a sense of inwardness; everything is drawn out onto the surface.

There are very few twentieth-century English 'nature writers' I bother to read, but there are some outstanding writers on nature. I love Iain Sinclair – all his London books of course, but also *Edge of the Orison*, his wonderful book about the poet John Clare, retracing his walk from High Beach asylum in Essex back to Northampton. It's not really nature writing, and yet... *The Snow Geese* by William Fiennes is another great book in this area. I became more and more attracted by his description of the journey and of the birds.

Ronald Blythe's work goes back to *Akenfield*, but more recently he's published a trilogy collecting his *Word from Wormingford* columns for the *Church Times*. They bring reflections on local, theological and philosophical matters together with a description of the life of the writer.

I love *Waterlog*, by Roger Deakin, which is about swimming his way through Britain. And in *Findings*, Kathleen Jamie has written far and away the best book in my field.

I return to the Romantics – Clare, Blake and Coleridge especially – again and again. But in terms of my professional writing, most of the books I now read for pleasure and inspiration are American. Because the United States contains really wild places, the writers aren't afraid to write wildly. Their vision is bigger. And they are considered writers, not 'nature writers'. Annie Dillard won a Pulitzer prize for *Pilgrim at Tinker Creek*, a level of literary honour that is scarcely thinkable in this country.

There has been a tradition of high-quality nature writing in America from the nineteenth century on, with Henry David Thoreau there at the start. The American tradition is broader, more poetic and with a greater sense of philosophical enquiry than anything in Britain.

Other American writers important to me are Joseph Meeker, Barry Lopez – author of *Arctic Dreams* and *Of Wolves and Men*, and David Quammen. Quammen's *Monster of God* looks at the role of big predators in the human consciousness – what does it mean to us to know that there are man-eating lions, tigers and bears out there?

Richard Mabey's books include *Fencing Paradise* (2005), *Nature Cure* (2005) and *Dreams of the Good Life: The Life of Flora Thompson and the Creation of Lark Rise to Candleford* (2014).

## Why activists should read the *Financial Times*

James Marriott

In 2007, James Marriott, member and co-founder of Platform, a collective working at the intersection of arts, activism, education and environment, talked to Robert Butler about studying the *Financial Times* and *Petroleum Argus*.

For the background material for our work on oil and climate change, I work very closely with Platform colleagues. Together we track two companies, BP and Shell, and think very hard about them. We've done that now for ten years. We read four kinds of things between us.

One is the financial press – the *Financial Times*, the *Wall Street Journal*. I read the *Financial Times* more or less from cover to cover. I particularly read the companies report at the back, which is a column about what is happening in various key stocks. There's rarely a period longer than five or ten days when they won't report on BP or Shell, because BP and Shell together constitute between 18 and 19 per cent of the entire FTSE-100.

The second thing we read is the trade press, papers like *Upstream* or the *Petroleum Argus*, dealing with specific sectors of the industry, but on a global scale.

The other reading we do is the activist network, the critics and artists. At any one time, there are hundreds of campaigns. Just off the top of my head, in relation to BP, there are people campaigning in Iraq, in Azerbaijan, Georgia, Nigeria, Colombia, around the North Sea. All around the world there is resistance to the way oil and gas development takes place, and to the very principle of it. Everywhere around the world, there are groups saying we don't like this, and this is why we don't like it, and churning out information about it, mainly on the internet.

And number four is dialogue with people within the institutions – an expanded notion of reading – talking to people in the oil industry or associated industries such as advertising, or people who have been in the oil industry and retired. We're constantly trying to find people to sit down and talk with. What I'm looking for is colour, texture, character. Literally, *character*. How do the companies think? How do the individuals think? How does a corporation as an institution think and feel? What are its fears? That's texture.

What I find intriguing is that, generally speaking, we don't think of these companies as having character. They have a logo on the petrol station and so on, but they're not portrayed as having any texture. BP is hugely powerful. It's certainly more powerful than many states it works with in the world. You could argue that it's more powerful than the British government.

What interests me is that the government and the state are things that are tangible and characterful, full of characters. Tony Blair and Gordon Brown and David Cameron ... the drama is constant. It is constantly theatricalised in front of us. Now what do we know about

BP? It's largely faceless. And the media don't create theatre out of it.

During the petrol crisis in 2000, BP put forward Chris Gibson-Smith – now chairman of the London Stock Exchange – to talk about it on *Newsnight*. I watched the interview with Jeremy Paxman and I thought it was astounding. Paxman didn't know anything about this guy, didn't really know what his job was. He got his job title wrong, didn't know what his remit was in the company, didn't know anything about his personality. If this interview had been with even a fairly low-level politician, he would have known his inside leg measurements.

It was a demonstration of the fact that in our culture there's no character to these things, and regardless of any critique of should we or should we not have corporations, are they good or bad etc., these companies are just not represented.

The modern-day corporation isn't a monolith. It doesn't have everything done in-house. It exists as a web of other institutions which it works with and interrelates to. Part of what we do in the Unravelling the Carbon Web project is a cycle of events called Gog and Magog. We do walks in London, with a small audience, every three months to try and unpack the web of institutions that make Shell and BP function.

The walks take place on the days the quarterly results are released. There are four very important days in the year for Shell and BP and the AGM isn't one of them. Every large corporation has quarterly results. They say, 'On this day, this is how we've done for the last three months.' At that point, you can see all these institutions interacting. We're trying to unpack, but also theatricalise these most important days. The four quarterly days, when they have to say, 'This is how we're doing, this is what we're going to do,' is a moment that they build up to. It's a piece of opera. I use 'opera' advisedly. Their events are for a very small audience, about 200 people – journalists, analysts – and they are really carefully staged, with music and lights, as they say, 'We are the world's seventh largest company, and this is how we're doing, and you're going to carry on investing in us.'

The idea is to take a small audience on a performance walk, trying to get as many people from that web of institutions to be on that event. We go to a whole set of different locations, in the City of London mainly, and a bit in the West End. We use the fables of Gog and Magog, the two giants who founded London, as part of the performance script. This piece of work is called Gog and Magog because BP and Shell are very, very closely related. They're twins. If you map them, as we've been doing, you could certainly argue that they are one financial block.

It was out of these walks around City institutions that John Jordan and I developed the idea of *And While London Burns*, an opera for one that you can download onto your mp3 player and follow through the streets and alleys of the Square Mile.

[And While London Burns was reviewed by Robert Butler in 2006 \(see page 100\).](#)





*On the Beach*, the Bush Theatre, London, 2009. Left to right: Robin Paxton (Robin Soans), Jenny Paxton (Susan Brown), Will Paxton (Geoffrey Streatfeild) and Sarika Chatterjee (Stephanie Street). Photo: Tristram Kenton.

## It all started with James Lovelock...

Steve Waters

The playwright Steve Waters talked to Robert Butler about *The Contingency Plan*, his double-bill of plays about climate change, first staged at the Bush Theatre, London in May, 2009.

**Robert:** When did you first think you might write a play about climate change?

**Steve:** In about 2006, I was invited to do a project with Hampstead Theatre, where I was matched with a younger writer, George Gotts. We were doing something called 'Daring Pairings'. The idea was that you would write a play together very quickly. We both decided we wanted to write something about James Lovelock. His book *Revenge of Gaia* had just come out, so we both read it, and then we wrote a series of scenes very, very swiftly in response. It was titled *A Plague of People* and it got a reading and went down very well.

I got very interested in what had surfaced in that. There was this older couple, Robin and Jenny – who feature in *The Contingency Plan*. They're the parents. And there was Will, who's a young scientist, a glaciologist, going into government. There's a scene where Will meets with a civil servant and she is blindly unaware of any of the things he wants to tell her, all the bad news if you like, and it was quite a funny scene.

I was keen to write something about climate change. It seemed, in 2006, there was a step-change in the public discussion about it. Lovelock seemed to crystallise that because the book was so scary and so full of drama. There's something wonderfully lurid about that book and something really quite repellent as well.

**Robert:** Were you thinking of Lovelock as a Cassandra figure?

**Steve:** I think so. Lovelock interests me because, firstly, he was such a visible figure. Secondly, he was such a contradictory figure. He was railing against urban greens and was very critical of certain mainstream environmental politics. On the other hand, like no one before, he was saying it may already be too late. We may have already passed various tipping points. That's the sort of person that interests me. Somebody who in a way embodies some of the fault lines within green politics. There's something really misanthropic about some of that book.

**Robert:** So he would be a much more interesting dramatic figure than say Jonathon Porritt because there are so many contradictions?

**Steve:** Absolutely. In the fragmentary play I wrote for the Hampstead, there was one scene with Robin and Jenny, and they were walking in the Peak District and suddenly he turned to Jenny, who he's been married to for many, many years, and said he couldn't be in a relationship with her anymore. This profound negativity and pessimism that he was expressing was something I wanted to pursue further.

In that scene there were a lot of allusions back to Rachel Carson's work and Robin's own early environmentalism and a sense of a lost opportunity, and a genuine, profound pessimism for the future. There was something that had totally eroded his belief in relationships and human beings. That psychology really interested me.

**Robert:** What did you learn from presenting that earlier play at the reading?

**Steve:** One of the things is how you think you're in a great community of talk and debate about climate change, and actually you're not. You're in a little bubble of concern about climate change. I was quite staggered by how many people, in the liberal arts scene in London of all places, didn't even seem to have the first inkling of what I was talking about. It was just a dim presence on their radar. They didn't even know whether they believed it at that point. Even though it seemed to me a burning issue, the thing I just had to get out of my head, for other people they hadn't even begun to get it into their head, and that was pretty scary.

**Robert:** A very important event, which you must have come across quite early in your research for *The Contingency Plan*, was the 1953 flood.

**Steve:** I wanted to make sure that everything in the play had a precedent in some respect. This 1953 flood was a very particular event, in the sense of the devastating impact it had on eastern England, and on the Netherlands. It was largely to do with early warning systems not working, with a series of very contingent factors to do with tidal surges, to do with the fact that it was a spring tide, to do with weather conditions, the direction of the wind, and so on.

So a number of things combined to make an ordinary event an extraordinarily devastating event. I think 300 people died in England, thousands of people died in the Netherlands. It almost happened again very recently in 2007. There was an event in the autumn where Lowestoft and places on the eastern coast were subject to very similar conditions. Gordon Brown called a COBRA meeting. They're all in the bunker there, just like they were when the banks failed.

**Robert:** So your basic premise was that – with the ice from the Antarctic melting – if 1953

happened again, it would be massive?

**Steve:** That's right. Obviously the play indicates it's probably Greenland that's culpable. But the character at the centre of the play, Will Paxton, the glaciologist, is bringing even worse news. He's saying, look, this is an intimation of an even more scary scenario. He works on the biggest ice sheets in the world and even they are not utterly impregnable. That's his argument.

I suppose the thing that made the play plausible to me was the way in which every time you hear the IPCC report, everything's at least ten or 20 years ahead of what they imagined five years previously. That sense of the non-linear aspect of climate change was the conceit that drives the play.

**Robert:** In the plays, the father and son are both glaciologists. The father worked on Pine Island in Antarctica back in the 1970s, and he discovers information that makes him think that actually the ice sheet is not that indestructible and he goes to the Thatcher government. The government doesn't listen to him and this precipitates his resignation. The work of the father is carried on by the son. He goes into government, in Whitehall in the present day. Is all this fictional?

**Steve:** The kernel of the story came when I was talking to John King at the British Antarctic Survey. He was in East Antarctica on the peninsula about ten to 12 years ago, and there was much more warming than he had been anticipating. It was apparent that an ice sheet was about to break off from the landmass. Greenpeace contacted him and asked, 'Should we mobilise around this?' He said he couldn't make a political gesture at that time. His ethics as a scientist prevented him making that leap into politics. And then ten years later, the science had lined up. The warming could be explained by anthropogenic climate change.

What intrigued me was the idea that somebody might be working in Antarctica in the 1970s, but they weren't interested in climate change. What would happen if somebody at that time had started to see evidence of something but they didn't have a paradigm to explain it as climate change? It was developing in certain areas of science but there wasn't a consensus.

I imagined this man finding this out, and getting a pretty dim audience from everybody around him including his colleague, the character Colin Jenks, and being destroyed by that premature knowledge. Then turning in on himself and being very destructive as a consequence.

There is something genuinely tragic about the whole question of climate change. Whilst we know there are political ramifications, we know people are responsible, we know there's culpability and all of that, at the same time it is a genuine tragedy to me in the sense that

it's something that we've all inherited, it's something that we didn't necessarily set into motion knowingly and it's disproportionate in its impact. I wanted that feeling in the play. This sense of there being this long secret waiting to be discovered under the ice or in the atmosphere and it then was discovered too late and responded to, too late.

It's a sort of Ibsen play in the way the past impacts on the present and it's too late to address that particular aspect of the past.

I was particularly interested by Will. He'd grown up sensing this darkness in his father and how that manifests in misanthropy. Again, thinking of Lovelock who was marvellously robust after being disbelieved for so long, who carried on speaking to people, meeting with Margaret Thatcher, keeping his Gaia thesis afloat even in the most arduous of circumstances. But Robin is not robust. He turns in on himself and as a consequence he sets this poison chalice for Will about disengaging altogether from public life.

I met with a lot of scientists who, generally speaking, were uncomfortable about politics, sceptical about the way government works, anarchist in their instincts in some respects. All they respect is other scientists and the very particular work that they do. The thing that interested me in the play was: how do such people speak to government and how does government speak to them? It's very easy for government to decide to dispense with people who are telling the truth.

**Robert:** In the plays, you didn't have anyone who was a green advocate. Why did you keep out that strain of the debate?

**Steve:** One could already imagine what that character would be like. They are very hard to engage with theatrically and very uninteresting in some respects. They're too smart, they're too clever, too knowing and they would articulate the subconscious of the play. I just don't like that sort of play and I'm interested in finding voices which are a very long way away from my own, in terms of the language they deploy and their morality.

The character Jenny is an interesting example. She's involved in mitigation activities and carbon reduction and community things. It's laughed at merrily in the play, but I'm totally behind that. That's what I do. That's the activism I can understand and engage with. But I can also see how a scientist such as Will who knows the scale of the problem might find it hard to find any value in it.

**Robert:** Did you think you had to explain climate change to an audience?

**Steve:** I tried to side-step explaining climate change. The play says 'it's a given'. What it tries to explain instead is local manifestations of climate change so there are a couple of 'lantern lectures' moments. In the first play, *On the Beach*, there is this hilarious but also

grotesque moment when Robin, with a fish tank and a model and a scale map, shows his family what will happen to his land in Norfolk with climate change.

They're all thinking this is a manifestation of his breakdown. It's a horrible scene in some respects but it's quite funny, too. The audience were looking at the model in the interval. You feel so fraudulent, because of course, it's not unrealistic, but it is an act of fiction.

In the second play, *Resilience*, Robin's nemesis is the scientist Colin Jenks who's the government advisor. He does a demonstration about resilience. Everyone holds a piece of string, like a cat's cradle. Then, he says, let's take away the trees, let's take away the worms, and he starts cutting it. I took that from the *Transition Handbook*. It's a common workshop exercise but it seemed like a delicious thing to do with government ministers standing there pretending to be oak trees or jays or worms. It was in a sense didactic but it is a comic moment, and I think as long as those things are grounded in a character or a theatrical moment then you can smuggle them through.

**Robert:** When I saw the plays, I was sitting next to the *Daily Telegraph's* critic and at the end of the first play he turned to me and said, 'Tell me this isn't true.' Did you get feedback from any scientific or government advisers?

**Steve:** I think some people from the Department of Energy and Climate Change came. They didn't send me an angry email, but in the play, they came off lightly.

**Robert:** It's set in a Tory government and the Conservative minister is always saying, 'Ahh, what am I going to tell David?'

**Steve:** I have a strong, queasy feeling about the Conservatives in power. That's a bit tribal of me. I just wanted a new government who in the very first week of their tenure have this disastrous flood in Bristol. And before they've read the papers and been briefed properly – what are they going to do about it? Because it isn't going to happen at a convenient time, let's face it.

**Robert:** The government advisors and ministers are around a table in Whitehall, wondering whether to evacuate towns along the east coast. The country is watching *Strictly Come Dancing*. If they make the wrong call, 'David' is going to be angry.

**Steve:** The best analogy was the build-up to Y2K, to the Millennium Eve, when everyone looked foolish afterwards. It's a very difficult position for the government, but it struck me that a Tory government might have said, 'Well, the state would make it worse. People

should make their own arrangements to evacuate.’ The ‘invisible hand’ would evacuate Lowestoft.

**Robert:** It strikes me when reading your plays that they are about people at work.

**Steve:** I’m interested in people under pressure, people in situations where they make moral choices. There’s this fascinating thing in theatre about representative character – somebody who stands for something, somebody who manifests a tendency or an idea. One’s always trying to work against that, but I do think people are like that. There’s a degree to which people define themselves ideologically and then they behave accordingly. I am interested in the way people manifest their convictions, but also the way they get lost in them.

Someone said to me that I’m really interested in people who are wrong. I thought that sums it up very neatly. I am very interested in people who are wrong. I feel I’m wrong a lot of the time. I’m ignorant. I don’t know what the hell I’m talking about. There’s a lot of time when I feel like I have no right to say this. I think those characters who are in that position really interest me. People who haven’t quite got the authority or speak beyond their brief or who transgress some kind of social code. And they’re wrong but they’re right.

**Robert:** Is there an education going on, in the best sense of education?

**Steve:** Yes, in a sense it’s educational, but that sounds too pat doesn’t it? There’s a degree to which I don’t know what I think, but I know the play helps me think aloud and I hope it helps other people think aloud, too. That’s the way it seems to me to work rather than imparting a body of knowledge.

What kind of knowledge serves politics? How can any mind contain all the things that one needs to know to make a decision about most of the things that politics pertains to? *Resilience* is a satire. The huge challenge to the politics of climate change is outside of the knowledge of politicians.

**Robert:** One wants a lot more plays now, not necessarily climate change plays but plays that are dealing with capitalism or consumerism or the idea of the individual against the group and our responsibilities. These touch on themes that are very pertinent to climate change but don’t necessarily have to go under the banner of climate change.

**Steve:** Absolutely. Most playwrights are urbane folk. They live in cities and they sit in theatres and they’re in a particular place where nature doesn’t feature. There’s a strand that is very absent from English theatre but not from Russian theatre or Norwegian theatre. In Australian theatre, it is interestingly present.



*Resilience*, the Bush Theatre, London, 2009. Left to right: Tessa Fortnum (Susan Brown), Colin Jenks (Robin Soans), Sarika Chatterjee (Stephanie Street), Will Paxton (Geoffrey Streatfeild). Photo: Tristram Kenton.

It intrigues me, why is there not a play by David Hare about climate change? Why isn’t there a play by David Edgar? There’s a real generational thing there. They don’t know how to talk about it, so the traditional left is in trouble. Caryl Churchill is the only one who’s made steps towards it, because of her background in feminism and her connection to environmentalism.

The only hope I’d derive from climate change is that it has generated a completely different sort of politics, which is now proving to be really robust. It doesn’t need government in the same way and it does reach over to government, like 10:10. I’m not saying it’s the solution but it does get people talking very quickly and that gives me an enormous amount of hope.

This conversation took place as part of the [Cultures of Climate Change seminar series at CRASSH, University of Cambridge](#) (see Bradon Smith’s essay, page 9).

# PROJECTS

## Why are there no plays about climate change?

In June 2005, the editors of the Ashden Directory hosted a discussion about the lack of major plays about climate change. Around the table were:

Dawn Bishop, policy officer, Council for Environmental Education

Emma Dunton, executive producer, Actor's Touring Company

Kevin Graal, storyteller, Talking Tales

Caspar Henderson, journalist

Anthony Koncsol, director, Konflux Theatre-in-Education

Pete Rogers, new media artist

Miranda Thain, director, Konflux Theatre-in-Education

**Miranda:** With climate change, it's such a huge topic on a global scale, we're confronted with the problem of how we can make it relevant and real to younger children. How can you explain climate change to a five-year-old in an hour? How could they make any difference?

**Anthony:** As a learning-through-theatre company, do we go for the immediate impact? Or do we go for planting the seed for children in the hope that in 20 years' time they will want to become actively involved in actually making a change? If that's not too late.

**Kevin:** You've got to grab their attention and make the thing concrete. I use traditional stories, creation myths, legends and folktales from around the world. There's a traditional story for every situation, for every theme.

I'm sure that the place to start is with very young children. You have to start as early as possible to educate a generation of children who will have the vocabulary in their grasp. They are the five-year-olds at your shows now. When they're older, when they're in their sixties and seventies, the shit really will have hit the fan. And then they'll be more likely to act, or pressure their politicians to act, when they become citizens. I don't think we need to wait until they are teenagers or they are intellectually capable.

**Dawn:** Environmental organizations like Greenpeace, WWF and Friends of the Earth produce loads of good stuff for teachers. But the thing that shocked me is that it's all science and geography. There is nothing for art teachers or drama teachers. There's no encouragement for art or drama teachers, and these issues can certainly produce imaginative works of art. Why are these organisations limiting themselves to making it

so factual? Because ultimately climate change is an emotive thing. It's looking at what we value and whether we want to preserve it. We're all going to be affected by it, and we're all contributing to it.

**Kevin:** Sometimes the way to go is through metaphor and allegory. If you want to get children to understand how sacred the land is, then you can tell them myths and stories about baddy characters who desecrated the landscape, and then had really heavy things happen to them. That fires them up. There's no end of stories about what happened to people who desecrate trees.

I recently discovered this wonderful Greek myth. A king destroys the Earth Goddess's tree. So the goddess sends the spirits out to the north to get Famine to visit him. Famine breathes into his nostrils and he wakes up absolutely starving and nothing he eats will satisfy him. In the end, he eats himself, he consumes his own flesh. It's an unforgettable image of what we're doing. We're consuming ourselves. Something like that, which is not agitprop or didactic, grabs children. They'll remember it. Later on, when someone's talking about trees, they'll have that imagery in their mind.

**Emma:** I think, simultaneously, we should be educating adults – now. Drama is the perfect medium for a story about a crisis. There are plays about AIDS, but in some ways AIDS is a more graspable subject. You can weave personal stories out of it because it is about individual people. With the environment, it's this drip-drip effect. Nobody's quite sure how bad it really is. To get those themes in the context of an adult play is quite hard.

**Caspar:** The Hollywood film *The Day After Tomorrow* tried to make a big story out of climate change with big production values. But clearly, the scenario is absurd. A scientist, Myles Allen, at Oxford University, told me there were surveys done on people after they had seen the film. People were less concerned about climate change because they saw this extreme thing and thought, 'Oh if that's what it's about, I just don't believe it.'

**Kevin:** Philip Cooney, the Chief of Staff to the chairman of the White House Council on Environmental Quality, removed scientific evidence from documents on climate change for the American government, making climate change sound less threatening. I thought that would be a great story.

There is this wonderful phrase 'weasel words'. It's very hard on weasels! But the idea is that the weasel can suck the contents of an egg and just leave a very small hole. It looks like it's a normal egg, but in fact it's been drained of life. This is what these people do with words. They drain the meaning out of them.

Politicians every week, every month, every year, will be giving us a host of new clichés that

we're supposed to learn. That's a drama to be told for us, for grown-ups. There are traditional folk tales about how the manipulation of language allows people to commit crimes.

**Caspar:** There's a good play to be done about that meeting after George W. Bush's first election, when Dick Cheney, the vice-president, held a meeting to discuss US national energy policy, behind closed doors, with Exxon and others. We still don't know what the key decisions were.

**Dawn:** If you wanted to get people writing plays about climate change, what sort of things could you do? Would you have a competition? Would you go to an established playwright?

**Emma:** You could go to a theatre company or venue who did new writing, like the Royal Court or the Bush. You could commission a play, or have a competition and a prize for the best play. You could have one or two established playwrights spearheading it. I'd be very careful about doing something very broad like 'the environment'. You need to put it in some sort of dramatic context, like the meeting with Dick Cheney.

**Caspar:** The classic problem here is that cause and effect are a long time away from each other. The current climate is heavily influenced by historic emissions. You can't go into the guilty guy's office. Not in quite the same way. It makes it much more difficult to dramatise. We're not going to see the consequences of what we're doing now for probably most of our lifetimes. And, once you get into the complexity of the science you have completely lost the drama.

**Kevin:** It seems a bit strange that we're talking about how to commission or make this work happen. Artistic work happens because people feel the need to express something. And it seems a bit artificial to force it. So the question must be, 'Why aren't people feeling this desperate need to express this?' It must be because the consequences seem to be so far ahead. You never miss the water until the well runs dry.

**Emma:** That's why there are so many history plays, because we've now seen the consequences of these things, and so now the playwrights can write about that. You need to tap into a particular story or event.

**Caspar:** It doesn't need to be a very didactic Brechtian play. Although I'm sure if Bertolt Brecht was around, he'd be writing plays about climate change.

## Asking difficult questions: climate change and performance

In 2009, the editors of the Ashden Directory invited six people to propose a question about climate change and performance. Each question was answered by another person in a chain of exchanges recorded in the film, *What can be asked? What can be shown? British theatre and performance in the time of climate instability*. The six were:

Mojisola Adebayo, artist and theatre-maker

Dan Gretton, writer and co-founder of Platform

Wallace Heim, academic and co-editor of the Ashden Directory

Paul Heritage, academic and director of People's Palace Projects

Clare Patey, artist and curator

João André da Rocha, performer and associate producer of People's Palace Projects

**Mojisola asks:** How do we research, make and tour international performance and art about climate change without contributing to its causes? How far is art worth the damage?

**Dan responds:** My first reaction was that I was uncomfortable with the implications that artists have a special dispensation, implying that artists have rights other citizens don't have. This is a bit too close to environmentalists jetting around the world for weekend conferences on climate change. A term I use for this is the 'narcissism of frenzy'.

But thinking further, the implication of Mojisola's question is to look at the specific and unique role art can have. We live in a time when, rationally, everybody knows the critical issues to do with climate change. All the scientific data is out there. We've had the reports.

But this has stayed at the rational level. The great challenge in the next years is connecting that rationality with the gut because that's where change really begins and where art has an enormous role. In Platform, we say we try to connect the frontal cortex and the solar plexus. That's where art is critical.

On travelling and moving around – there's something paradoxical in the world. There's the illusion of connectivity. We think technology has given us these new ways of communicating – Skype and Twitter and Facebook and all these technologies. But my experience is actually that people have never felt less connected. To meet people in real places in real time and have that eyeball-to-eyeball contact has become more important.

We've always attempted in Platform to work in a long-term way. We've been working on the human rights and environmental impacts of the oil industry since 1996. And

something happens after a certain amount of time – whether five or ten years. You get to a depth of working where you're beginning to have real political efficacy. There's a real power to the work you can do.

So much of the world, in terms of capitalism, emphasises the short hit, the quick turnaround, move on to the next subject. If you subvert that, something remarkable can happen.

**Dan asks:** My question starts with a quotation from the German writer Rilke: 'I've often asked myself whether those days on which we are forced to be indolent are not just the ones we pass in profoundest activity. Whether all our doing when it comes later is not only the last reverberation of a great movement which takes place in us on those days of inaction.'

In the light of increasingly apocalyptic forecasts about climate change and an understandable tendency for many of us as artists, activists and educators to react to this changing reality by mirroring it with increasingly urgent and sometimes apocalyptic language – for instance the recently released film *Age of Stupid* – in light of that, how do you respond to Rilke's question? Could you talk about the role that slowing down and reflectivity play in both in your creative process and in your interaction with your audiences?

**Clare responds:** I've worked within different types of organisational cultures, from campaigning to the corporate sector to television and theatre. All of them have something of speed about them, whether that's the clocking-in and the clocking-out, or the 'do it now', the urgent response. None of them are about or accept slowing down as part of their culture.

The first time I had to face the idea of slowing down myself was when I devised this project *Feast* that happened on an allotment and that was about growing an alternative school dinner over the course of a year (see 'The allotment with roots in every classroom', page 90). Suddenly I wasn't in control anymore and neither was the clock. We were back in nature's time and back to the arc of the year and the sun rising and setting and the fact that the bean took that long to grow. And we couldn't do anything about that.

Not only did that slow the project down, it informed its integrity in the way that people began to work and to interact. The children who took part in it are part of school culture, which is time-orientated and doesn't encourage you to slow down and have time for the imagination and time to think.

We were involved in productive and creative and physical activity – gardening. We were weeding or we were planting. For me, one of the most magical things that came out of the project was that it allowed time for incidental conversation. Teachers remarked that they had never heard kids talking in that way to one another. It seemed to be about what



we ought to be doing.

I agree with Rilke. It's about that space and its rhythm. It's a belief that like nature, like spring comes after winter, ideas come after periods of rest. We're all part of that. It's about that balance and cycle. It's about harmony.

And, it's an act of defiance. It's fighting against 'fast' – meaning speed is good; 'fast money', 'fast food' ... 'fast'. Capitalism is fast. Modernity is fast. Gardening isn't fast.

**Clare asks:** How can we reunite culture and agriculture through performance?

**João responds:** Thinking about agriculture in Brazil is quite different from talking about agriculture in Britain, Europe or the United States. Culture in Brazil is still close to the countryside, because 50 per cent of the population in Brazil lives in the countryside.

One way to reunite agriculture and performance is in looking at how food is being produced, how countries are producing and selling food, transferring food to other parts of the world. When we talk about Brazil, people are fighting for the right to have some land to produce food for their family. People are still dying in Brazil because of the Landless Movement. When we talk about Amazonia, for example, the deforestation is not about only destroying nature. It's about technology; it's about how we are producing food.

To reunite agriculture and performance, we will find new ways to perform, really innovative ways to perform. To rescue rural culture, we need to understand agriculture as well.

**João asks:** Talking about climate change and the environment nowadays, could it be fashion? It is easy to talk about a disaster, for example. I would like to ask about your personal life, practically, day by day, what are the steps you are taking to decrease the impact of your life in the world?

**Paul responds:** João's question goes to the essence of what we are talking about: what am I really doing to reduce the impact of my life in the world? That personalisation of the cultural politics around environmental action reminds me of the work we did 20 years ago, and have carried on doing, around AIDS and HIV. Environmental and cultural activism is a reminder of that deep personal intensity. What do we do to change?

The question is extraordinary. It's about disappearance. How can we move towards our own disappearance in a positive way? By reducing our impact. We cease to want to place ourselves out there, which is almost the complete opposite of what every artist does, in the traditional western idea we have had of the individual artist since the Renaissance.

What am I doing? I can only talk about it in practical ways. Our project *Amazônia* was an example of the sort of partnership that João indicates is the solution if we are going to be

able to work together. We worked with existing cultural forms, the dance and drama forms of the Amazon region, with local artists in order to produce work that would deal with the impact on their environment, not us as artists from outside making the work.

João talks about the strategies, partnerships and structures we need to set up. What I've taken from working in the Amazon region has been about how that connectedness is the only way we can hope to work to move forward.

Also, this brings a constant realisation that this work is about form and structure and the ways of doing it rather than about content and what is said. It is about the quality of those partnerships and the ways in which we form them.

**Paul asks:** How can we listen to, see, feel and learn from those who are talked about rather than those who are talking in the great climate change debate?

**Wallace responds:** To answer this, I want to think about how climate change makes this question different from other political situations; I want to think about how listening can be done; and I want to think about how this question might change how theatre is made.

I think climate change muddles the orders of peoples and publics that have been made in other contexts, particularly other political contexts. I think it's shown up very complex patterns of connections that cross location, that cross time and culture. So I think that it's not only those who have been rendered invisible or unheard in any culture, or those that are most vulnerable or those most immediately suffering that need to be listened to. It's possible that one must also listen to those who might be economically or educationally privileged. It's also necessary to learn from various expertises, whether that's the scientific, the institutional and local knowledge.

But those to whom we really must listen – in the widest sense of listening – are the other living beings, the animals and the others, the habitats and environments, the elements and processes, the circulations upon which we depend. This kind of listening may actually change how we listen.

How can listening, seeing, feeling and learning from another be done? I don't have any short answer to that. I don't think there's one form of listening. Listening to a river is very different from listening to a human adversary. I think one way to start is to stop talking but this doesn't mean a blank silence. Listening is fiercely difficult.

Oddly enough, I think a good conversation is a good analogy for listening. It depends on the relations between those who are together. It depends on being open to being changed by what one has seen or felt. It also involves judgement in being able to discern who's making sense and who's making noise or merely capitalising on the situation. Sometimes it can mean having to give an account of oneself in public which can be very painful. A good conversation has a life of its own. It's not really in anyone's control.

The ideal would be to spend time together face-to-face, but this isn't always possible. I think the responsive and critical imagination required for listening at a distance is crucial to develop, if it can be. I want to think, too, about why listen? Why is it necessary?

The question Paul raised is really a question about climate justice. It's about how listening and theatre-making can be involved in the challenge to redefine and reinvent what it means to be just and for whom in the face of climate change.

I also think that justice isn't merely a set of rules and decisions but it's a way of knowing what to do in a situation that is so unprecedented and complex that there's no experience or no principle to show the way. The practice of listening can play a part in developing that capacity to respond to change.

I don't want this focus on listening to overshadow the imperative to speak and to express and to make very provocative theatre, because I think the question of how to listen has engendered new forms of performance making. Boal is an example and even Grotowski.

It could be these new and necessary forms of listening that are developing in response to climate change will be part of how theatre itself adapts and changes, because it must.

**Wallace asks:** The forms of theatre and performance are continually changing. They're adapting and evolving in response to ideas and technologies and desires. It's important to think about the material effects of productions but I think it's vital to consider the experience of theatre itself, the heart of its art-making, its immediacy, its relations and how these, too, might need to change. So my question is: What would you keep from theatre and performance practice and what needs to change in response to climate instability?

**Mojisola responds:** I asked my partner this question. She works for the Royal Shakespeare Company. She said that she thinks that some people in the theatre think they are above climate change. I really, really love that image – that somehow we are above this subject.

In the theatre and performance world, we have this belief that theatre is inherently good for you and therefore theatre-makers inherently do good and that nothing in our work could ever be harmful, and I think this relates to the question of climate change. I don't think that we are taking the subject seriously and I don't think that we are taking our practice seriously.

Obviously, climate change – wherever we work, wherever we live – has an effect on us all. The first thing that needs to change is that attitude that we are somehow above this subject.

Shakespearean theatre was some of the most ecologically friendly theatre and some of the greatest theatre in the western world. People performed outside; they used the sunlight for light. There weren't masses of fliers and pamphlets and thick programmes. Our theatre today is characterised by excess and indulgence in terms of big sets and costumes and

marketing and international touring. Perhaps we need to start thinking about what we need less of and start to strip that stuff away.

Lope de Vega said theatre is two human beings, a passion and a platform. I'd say, throw a bit of poetry in there and that's good enough for me. We need to think of stripping away. Very practically, we need to address the subject of international touring.

And lastly – everything I'm saying is as much for me as anyone else – I think we need to be wary of climate change opportunism. There's an interesting thing happening. We are starting to make work in response to the subject of climate change which is fantastic. Theatre-makers must make work in response to everything. But I think we need to be very careful of using climate change just as excuse to make more work, but without really taking responsibility for our own actions. I see a lot of that happening. I've probably been involved in some of it, and I think we need to be careful of it.

What do I think we need to change? I think we need to 'reduce, reuse, recycle', to make and create locally and review our attitudes in terms of our positions as theatre-makers. We are a little bit arrogant, and we need to change that.

The film of this exchange, *What can be asked? What can be shown? British theatre and performance in the time of climate instability*, was devised and directed by Wallace Heim and is available online at [www.ashdendirectory.org.uk](http://www.ashdendirectory.org.uk). It was shown at the 'Earth Matters Onstage' conference at the University of Oregon and was followed by a live video conversation between conference participants in the United States and the six contributors speaking from London.

## When flowers bloom on stage

How does the vivid presence of a flower draw attention and spark the imagination? How do real flowers behave on stage? In 2010, we asked a playwright, a performer, a designer and two academics to describe a particular flower in performance.

Frances Babbage, reader in theatre and performance, University of Sheffield  
Stephen Bottoms, professor of theatre and performance, University of Manchester  
Ian Garrett, co-founder and director, Centre for Sustainable Practice in the Arts  
Satinder Kaur Chohan, playwright  
Sue Palmer, artist and writer

### Poppy

The flowers were scarlet poppies and they burst through the wall. In 1997, the Lecoq-trained theatre company Bouge-de-là presented *Under Glass*.

Its young woman protagonist lives a closed existence in a cramped bedsit, selecting each day the same clothes, in the same order; her ritualized sequence of actions structures each day predictably, protecting her from all outside influence. Yet on one wall of her attic room is a poster of an Alpine field, studded with flowers.

An unvoiced and largely repressed fantasy of Switzerland and what this appears to represent is stirred into life when a young Swiss man, a neighbour, meets and fleetingly befriends her before leaving again, to return to his native country or travel elsewhere. The audience recognises, as he does not, the consequences of his actions for this vulnerable woman: better perhaps that he had never come at all.

In the performance's final moments, she is left alone, again, in the small, drab room – even more alone, because abandoned. She leans against the wall, unspeaking; the damage done seems irreparable.

Then, utterly without warning, flowers push their way through the wall. The dirty, fading wallpaper becomes an Alpine meadow, and pressed against it she appears to us to lie amongst poppies: maybe sleeping; maybe dying. She will never leave her little room; she will not travel to the places she dreams about. But in this moment she is transported there, and at the same time the pure fresh air and open fields burst in here. Living flowers, poppies, pushing in through peeling paper, connect two worlds: poetically, the image layers fresh against stale; movement against stasis; death against life.



*Under Glass* by Bouge-de-là (1997). Photo: Al Cane.

This woman will not trust someone else another time. She will retreat still further. Perhaps she will die. But as she breathes in the scent of flowers, we can believe that something has changed for her in a way worth the anguish that comes with it.

— Frances Babbage

### Daffodil

One moment – a movement – has fused itself onto my memory from *Let's get some weather in here*, a solo show by Mary Southcott.

Just off-centre in the performance space is a white plastic window box, and facing the audience are a row of daffodils, yellow and bright in the studio lighting. They are looking perky and buoyant as only daffodils can, and very yellow, the trumpet variety. At one point in the performance, Mary switches on a desk fan that stands behind the



Daffodils, Heygate Estate, London. Photo: Eleanor Margolies.

daffodils and a deeply satisfying event takes place.

As the fan turns its automated 120-degree span, so the daffodil heads respond – bobbing, nodding. The bobbing heads in the breeze are met by collective warmth and delight from the audience – our attention is absorbed by the responsive movement of the flowers that is so familiar, so recognisable.

Mary's simple creation of a small 'weather system' in the studio is utterly captivating: the outside is suddenly on the inside. The relationship between the wind and the flower is placed at the centre of my attention, so I can see in absolute detail the architectural brilliance of the flower at being able to both receive and resist the wind.

The articulation of the flowers and their ability to work with the wind 'speaks'; their 'heads' work with receptivity, capacity, intelligence. The daffodils have performed for us.

— Sue Palmer

### Breath of Life

Flowers are a bit queer. We think of them, habitually, as nature's gift of colour and scent, yet they are also the most intensely 'cultured' of plants: we see them in ornately presented beds, or simply cut and arranged into bunches, bouquets. For most of us, particularly those of us

in cities, flowers have typically been uprooted before we even see them: they have become human art and craft.

And yet, so often, we idealise them romantically, pretending that we are somehow apprehending their beauty in a virginal state of nature: 'I wandered lonely as a Cloud', wrote Wordsworth in his poem on daffodils, transforming himself from human into mere vapour, just in time for his revelatory apprehension, 'all at once', of the yellow host dancing in the breeze.

'Being natural is simply a pose', remarks Lord Henry Wootton in Oscar Wilde's *The Picture of Dorian Gray*, 'and the most irritating pose I know.' For Wilde, the artifice of human culture is inescapable, and that includes our relations with the so-called natural world: we live after the fall, in full self-consciousness, and simply 'being' – as opposed to performing – is only an option for the disingenuous.

No wonder, then, that the most renowned emblem of Wilde's proto-queer community of decadents and aesthetes was the green carnation – the 'little green flower' that his Salome promises to drop as a boon to the Young Syrian who admires her so. Carnations do not, of course, grow in green naturally – and for that matter they don't grow red, white or yellow either, though all these colours have been cultivated as variations on (deviations from?) the bright pinkish-purple that nature provided. The appeal of such cultivars to Wilde was precisely their frank reminder of the unnatural.

Something similar is apparent in the flower photography of Robert Mapplethorpe, in the 1970s and 80s. Mapplethorpe gave us detailed, precision close-ups that capture the classical beauty of the floral, yet the pristine lighting and cool composition of these images make these blooms unavoidably cultured – sometimes so 'cool' as to appear almost deathly. Mapplethorpe's fascination with the phallic properties of flowers, moreover – whether their stems or, more particularly, their pollen-bearing anthers and filaments – often seems to render them queerly anthropomorphic, particularly when juxtaposed on the wall with his human nudes.

It's not only male artists who have apprehended this queerness in the floral, though. Take, for instance, Susan Glaspell's extraordinary play *The Verge*, first staged in 1921 by New York's Provincetown Players.

The play's heroine, Claire, is a troubled, radically feminist figure who expresses her attempts to break free of old forms, old assumptions, both through her unorthodox use of language – which oscillates between tortuous stuttering and flights of strange poetry – and through her obsessive work as an experimental botanist.

The various men in Claire's life – Tom, Dick, and Harry – are tediously literal and natural(istic) by comparison, and they fear that her behaviour of late has become altogether too 'queer'. Glaspell's 1920s usage of the word doesn't appear to carry the same sexual connotations as it does today, but her inference is nonetheless towards something feared

because it is alien, inexplicable, an implicit challenge to the presumed 'norm'.

The ultimate expression of Claire's queerness lies in her cultivation of a tiny, fragile flower which she has named, simply, 'Breath of Life'. This is a flower which, Glaspell's stage directions tell us, 'glows from within' – but not with stereotypically feminine beauty. ('I'd rather be the steam rising from the manure than be a thing called beautiful!' Claire asserts.)

This paradoxical bloom, though bred by a human, somehow radiates a strangeness that is beyond the frames of reference within which humans categorise and control the products of the natural world. 'Let this be release', Tom whispers in awe on seeing the flower, 'This – breath of the uncaptured.'

Claire remains, however, unsatisfied, terrified that her creation (and her feminism?) will too swiftly become captured, accommodated, 'naturalised':

Breath of the uncaptured?

You are a novelty.

Out?

You have been brought in.

A thousand years from now, when you are but a form too long repeated,

Perhaps the madness that gave you life will burst again,

And from the prison that is you will leap pent queernesses

to make a form that hasn't been –

We domesticate flowers at our own risk. They're deviant little buggers – as queer as they are natural, as artificial as they are real. And we made them that way.

— Stephen Bottoms

## Lungwort

I have a lungwort, a *Pulmonaria Officinalis* 'Glacier', from Brantwood in my garden; it comes up perennially in early spring with a pale white-blue flower. When it flowers, I think of that large house and rambling garden beside Coniston Water, the former home of writer, thinker and art critic John Ruskin.

In 2001, I created a site-specific performance project, *The Price of Clouds*, at Brantwood. The house is a significant tourist attraction, and I wanted to make something unusual for visitors that unravelled some of Ruskin's philosophies and ideas, and to both work with, and challenge, the tourist culture.

I offered visitors the chance (free of charge) to come to a 'special guided tour' of the dining room overlooking the lake. I began as an ordinary tour guide would, speaking about the objects and features, but over the 20 minutes, I evoked some of the extraordinary events that had occurred in that room, using three 'elements': salt, money and flowers.

Ruskin wrote a book called *Proserpina* about plants and flowers (published in two

volumes, 1875-86). It went largely unrecognised at the time due to its eccentric collection of intensely detailed observations of plants and their processes, woven with passionate prose:

The flower exists for its own sake. The production of the fruit is an added

honour to it – is a granted consolation to us for its death. But the flower is the end of the seed – not the seed of the flower.

Ruskin's writing was rich with religious and moral beliefs, with flowers as the emblematic fulcrum of beauty and resonance.

I scattered flowers – collected and dried from both Brantwood and my own garden – around the edge of the dining table. As I introduced Ruskin's *Proserpina*, their perfume filled the room: roses, marigolds, camomile. Pinks, reds and yellows. Flowers normally contained and organised in vases now strewn over the table.

I invited the audience to consider this: Charles Darwin had dined there in 1879. He was 70, Ruskin was 60. The discussion was probably rich, with Darwin speaking about the recurring struggle for existence, the mechanical process that had little or no reliance upon soul or will, and Ruskin passionate about his belief that nature did not exist by competition alone, that cooperation and 'soul' played crucial parts.

As the content of a conversation over 200 years old was evoked, next to the flower petals, I placed a circle of one-pound coins: money laid down for Ruskin's criticisms of capitalist ideology, of mechanisation and loss of craft. His highly influential writing on 'value' was laid out in his book *Unto This Last*. Gandhi had read this on a train journey in South Africa; it inspired him to direct action, to the Salt March and the collapse of colonial



Lungwort. Photo: Sue Palmer.

India. So into the centre of the table, I poured salt. Normally contained as a condiment, now salt was spilling over, the grains scattered on the money and in with the flowers.

At the end of my 'tour', I offered a 'souvenir' of the dining room to each member of the audience – a small bag containing either salt, a pound coin or some dried flowers. Not only did this reverse the usual order of purchasing a memento of the house, but it provoked a complex choice for each visitor: each one had value, significance, a use even, and each object was imbued with meaning. Most visitors, I remember, chose the flowers.

— Sue Palmer



Kudzu. Photo: Jack Anthony.

## Kudzu

Every evening in most theatres, the air conditioning is turned up high, while technicians check every piece of 575+W lighting and meticulously focused speaker clusters. They ensure that there is no foreign light, that the artificial fog moves the right way, and that the audience is comfortably buffered from influences we don't control. This makes the ecology of the theatre inhospitable to most living things.

As a graduate student at CalArts, I worked on a production of Naomi Izkova's *SKIN*, in which the scenic design had a ground row of living plants between the audience and the stage. This thin strip of greenery was conceptualized as a natural lens to view a grey industrial space (really the theatre itself), and we worked long hours on supporting this living design element.

To maintain the foliage we removed the plants from the theatre daily to bring them into the sun. We installed a plastic membrane between the soil and the rest of the set to allow for regular watering. We had to find mature plants, and spares for those that died, to fill a flower bed one foot by 100 feet for two weeks of performances. Finally, we had to figure out where these plants would go when we were finished.

After all that, the plants never looked real. In the hyper-designed theatrical realm, their lush leaves looked bland – so much so that they were lit bright green to make them 'pop'. All this effort to include living things, for something that ultimately looked fake. We could have skipped this life-support system entirely, and plastic plants would have been just as effective, if not more so.

When I lived in Houston, Texas, I designed a set in a warehouse space. The play called for a large facade in a tropical location. I wanted to 'grow' the set, and researched kudzu, an Asian vine known as 'the plant that ate the South', brought into the United States to combat erosion. It is known to grow over one foot in a day. I quickly learned that it was illegal to bring kudzu into Texas. It is a plant that could tough out the harsh theatrical environment, but so aggressive that it is legislated against.

It is unnatural to enter a building in the early morning, sit in the dark and leave at night. During the winter months, I've not seen the sun for days. When I've tried to bring the outside inside – as in these examples – it has proved a poor substitute for a theatrical substitute or has been banned.

We should be thinking about our theatre spaces in the same way that landscape architects think about working with an environment. What is the best thing for this geography and use? How do we make a theatre space that fulfils our needs and desires, while supporting life? Perhaps rather than just putting solar panels on the roof, we should be thinking about making sure a building allows life into it in the first place.

— Ian Garrett

## Lotus

*Lotus Beauty* is the working title for a play I'm writing about the lives of different generations of Asian women in Britain, set in a ladies' beauty salon in suburban London.

While grappling with notions of 'beauty', I took a walk around my neighbourhood in Southall, west London. In a small park, in a dilapidated, brown-edged pond, a beautiful white lotus stood elegant and poised, rising above half-submerged carrier bags, cigarette butts, beer cans and smack needles in the murky water. Using the lotus symbol, I wanted to write about a spiritually bankrupt twenty-first-century British-Asian suburbia, increasingly obsessed with external beauty and the physical self, consumed by ego, money and materialism.

I asked my mother about the lotus in rural India. As a child, she used to pop lotus seeds with her friends, eating them like popcorn. Lotuses used to spring up in flooded fields in her village. As frequent drought and new development swallowed up ponds and swamps, few remain.

For the women in my play, the lotus eventually blooms in trapped lives, a reminder that untainted beauty can indeed rise from earthly mud.

— Satinder Kaur Chohan

## Snake's head fritillaries

Students on the site-specific course at Dartington College of Arts make performance work all around the estate, in fields and woods, along and in the River Dart. The college sits within a classic pastoral 'estate' landscape in Devon. The garden is the first part of the estate to fold out of winter: crocuses, hellebores, snake's head fritillaries, tiny vibrant pink cyclamen, white and mauve anemones.

From the end of February to mid-May the landscape transforms. The astonishing emergence from bare earth to flush of leaves and flowers and then to seed follows the trajectory of the creative process – researching, devising and performing. Flowers border journeys, fill the gaze and accompany the process of making.

The fecund Devon spring landscape is so complete in itself that to add 'theatre' to it often renders the maker superfluous to the 'event' of sheer abundance taking place all around: how can anything be added to a bluebell wood?

To balance the automatic lean towards Titania and the faeries, students look at Banksy's 'altered' oil paintings: a CCTV camera monitoring a pastoral scene. A more thoughtful attention comes into play: the flowers become visible processes that the performance work unfolds in relation to.

Wild garlic with its strong green leaves and white starflowers becomes food, material,

scent. Red camellias, placed along a rocky path descending through the woods between abandoned high-heeled shoes, fill the place with yearning. A bunch of bluebells given as a tryst in the crook of a tree for one audience member at a time, already written with the inevitability of the flowers' quick wilt. And the gardens, a site for subversive action: a 'guided tour' pokes fun at the quintessential English garden; another performance transforms it into a place of zombies and half-deads.

The flower-filled landscape is not seen or used as decoration or backdrop but as an environment to open perception and explore the magnitude and detail of both real and invented worlds.

— Sue Palmer



Snake's head fritillary. Photo: Sue Palmer.



'A stranger's compass' (see page 81). Photo: Wallace Heim.

## New metaphors for sustainability

Metaphors help shape the world in which we live. Some conjure up, very effectively, a particular set of circumstances: the 'iron curtain', the 'green belt' and the 'glass ceiling'. But some of the most pressing ideas are short of illuminating or imaginative metaphors – 'sustainability' is one of these. In 2011, the editors of the Ashden Directory asked artists, writers, cultural commentators and environmentalists to suggest a metaphor for sustainability.

### The act of breathing

I can't imagine something that sustains forever and the notion of an endpoint isn't there in the idea of sustainability. The word itself, from the Latin *sustinere*, means to hold something up. It's as if there's some magical wish to hold up against gravity.

The image I keep coming back to is of the breath with its inherent balance, and the craziness of trying to breathe in forever.

It's necessary also to let go, to recognise the limits of my ribcage, the limits of my diaphragm and body to hold any breath. And in letting go, in breathing out, I speak and sing to the world, and make a contribution that is unique to this body.

What is sustained is the song, is the music. It has to be let go of and given. It's that music, that note, that for me, sustains.

— Ansuman Biswas, artist

### A sailing boat

Sustainability is a rather grey and unclear term, but if it means anything, it means that we have to live with the finite resources of the earth. This sense of finite capacity comes to me through the experience of boats driven by sail and by oar that use the motive power of the wind and the tide captured through wood and flax and hemp.

Sailing makes you extremely aware of the forces of nature – it makes it very intimate. The skill comes from using whatever is there, that finite amount of power. The finiteness, too, comes from the space of the boat itself. The boat frames my needs and desires about where I can go and how long it's going to take me. It concentrates the mind.

— James Marriott, artist, activist, member of Platform





'The soil in my family's garden' (see page 72). Photo: David Harradine.

## The soil in my family's garden

We don't even know what to call it, whether it's soil or earth or dirt. 'Earthy' seems nourishing, homely, but we generally don't like things that are dirty or soiled. Dirty implies sex, which is getting to the heart of the matter: productiveness, creation, fecundity.

I keep an allotment in Hackney, inner London. For seven years I've been digging kitchen waste into the ground, applying horse shit gathered on Leyton Marsh, and bagging up leaves from the London Plane trees by the children's playground, waiting for them to break down into humus (brown nectar, nourishment, life). This soil, heavy London clay, grey-brown, full of pebbles: this is sustainability. It's what sustains me.

Everything I know about gardening – a knowledge that resides in my fingernails, the calluses on my palms, the ache in the small of my back, the blunt edge of my spade, and the dirty Tupperware box in which I keep my seeds – I learned in a garden in Yorkshire when I was a child. My grandfather was a market gardener. We grew gladioli, tomatoes, chrysanthemums, dahlias, potatoes and spring onions for the market in Leeds. I remember one afternoon, my fingers stinking of tomato plants, when I asked him if one day the garden would be mine. I could not imagine how life could continue without it. The very idea of family took root in that garden, with our hands and spades in that dark, scented, sensual soil; knowledge sown like seeds from generation to generation.

Soil: mineral structure fleshed out with the detritus of life and death. Wondrous recycler. Transformer of things into other things. As a child, it was unfathomable and miraculous to see the yellow-white flower of a double-headed chrysanthemum be created from heavy black soil.

Working my allotment in Hackney, I pull on the rake I brought from my grandfather's garden. I have started to plan what I will do when my parents die, when that garden may no longer be ours. I think I will sack up some soil and bring it to London, because it carries time in it, and memory in it, and it carries my family in it, and I was grown in it. And I am sustained, here in the city, by the memory of the texture of it and the smell of it. And by the life, the life, the life that turns on an infinite cycle in the hidden dark depths of it.

— David Harradine, artistic director of Fevered Sleep

## Coral reef

Healthy tropical coral reefs are among the the richest, most diverse and productive ecosystems on the planet. The secret of the reef is that nutrients and materials are reused and recycled with great efficiency and rapidity in an almost closed loop.

Coral reefs are places of stupendous beauty and wonder. Sustainability can and must be highly dynamic, just as a coral reef is: an arena for competition and struggle, yes, but an arena with limits and where new kinds of flourishing and cooperation are forever unfolding. Cruelty, suffering and death are not eliminated, but the scope for doing your own thing or doing something new – whether it be to bake cakes with five-year-olds, design new photovoltaic systems, or dance flamenco while dressed as a flamboyant cuttlefish – is greatly increased.

— Caspar Henderson, writer and journalist

## Mercury

My chief reservation about sustainability is that it can signify so many things to different interest groups. 'Sustainable forest' can mean a rich and ancient woodland drawn upon occasionally but left mostly to its own devices, or it can be a perpetual pine plantation supplying wood pulp and with practically zero biodiversity in it. There's no overall consensus concerning the precise shape sustainability will take.

That's why I've chosen mercury as a metaphor for sustainability. It challenges any assumption we might have that sustainability takes a uniform or consistent form among those considering it.

The image of mercury scurrying across a surface is familiar to most people, and is apt here because it allows us to better grasp the current ungraspability of sustainability. Sustainability is a fraught and fugitive issue, beset by political and personal evasions and manoeuvrings. What's more, the way in which sustainability can be made to adapt shape is both weakness and strength.

On the negative side, if mercury is mishandled it becomes a toxic nuisance; likewise, sustainability can be distorted, misrepresented or misapplied, either through ignorance or cynically, to allow damaging practices to continue beneath a veneer of acceptability.

On the positive side, if put to proper use in a careful and structured way, and if its complex nature is understood and worked with, sustainability also provides an extremely valuable, if not life-saving, tool.

Mercury can communicate what the weather's doing outside, or signal the degree of fever in the human body; sustainability, too, could be harnessed to monitor and sustain the wellness of our species in relation to its environment. Either that, or we can let the concept mess with our brains and slip through our fingers.

— Mario Petrucci, poet and physicist

## The timeless meal

What is it we're trying to sustain? For me, the meal is the emblematic, wonderful situation that sums up the whole point of sustainability.

When you talk about food, there's a tendency to talk about 'how much grain can you produce on that much land, with that much water?' That's very important, but you have to relate every conversation you have about food with the kind of life that you are talking about. It's about a vision of society.

The table is a place where you don't just share food, but you share ideas, you share love, you share conversation. It's a beautiful metaphor of the kinds of things that we're trying to sustain. It's 'good life' in every possible sense – not just good in terms of wonderful food – but also good in terms of the ethics of what you eat. If I am hungry, I have a practical problem. If you are hungry, I have an ethical problem.

— Carolyn Steel, food urbanist



'The timeless meal': *Feast on the Bridge*, 2009. Photo: Tim Mitchell.

## The 'shopping divider'

We come across it so regularly at the supermarket checkout, but there is no word readily available to describe it. We are reluctant to make explicit the distinction between our needs – *mein* – and those of others – *dein*. This is exactly where the beauty of both the 'shopping divider' and 'sustainability' could lie: in marking the confines of our needs, they enable us to direct attention to our fellow human beings.

— Monik Gupta, environmental blogger at Öko-Fakt



## Symbiosis

I have occasional bouts of recycling rebellion – I go 'fuck it' and throw it away. I want to waste, I don't want to be sensible. This is something to do with the moral imperative around the idea of austerity – it's just not fun.

Part of the idea about 'symbiosis', is that you don't have that same kind of moral anxiety around all of your actions. Symbiosis asks us to think about how there might be human symbiotic interactions that have benefits for the environment. You're directed to a positive action instead of endlessly thinking about the negative. The symbols for this kind of activity are bees and bee-keeping.

Replacing 'austerity' with 'ingenuity' celebrates invention and entrepreneurialism and thinks about what's at hand and what is possible in limited circumstances but treats those circumstances as a pleasureable challenge.

— Zoë Svendsen, lecturer and director of METIS Arts

## A matter of time

Sustainability is all about the allocation of the scarcest resource: time. How much time do we devote to what is in the present, and how do we balance the imperatives of time past, time present and time future?

The task, then, is to defeat the ravages of geological time and transfer those things of value from one civilisation to the next, particularly now that we have passed during our lifetimes from the Holocene to the Anthropocene.

For me, Homer's *Iliad* is the archetype of human value across time. The *Iliad* has survived the collapse of a number of civilisations through luck, persistence and care. But will it survive ours?

*The Iliad* was written perhaps in the eighth century BCE, some 2,800 years ago. For me, sustainability means enabling those in the future to have an equivalent chance to benefit from this fundamental text, constructing an arc into the future 2,800 years long. This means that my time horizon is (or should be) 4811 CE, far further out than the 2050 timelines of the climate negotiations or the 'seventh generation' thinking of the counter-culture.

The consequences of this shift in perspective are profound: we need to conceive sustainability as beyond culture and indeed language, as the transmission of value beyond time.

— Nick Robins, writer and analyst in corporate accountability and sustainability

## The Spiderweb Tapestry

### The interweaving

This tapestry is woven from the webs of a million Golden Orb spiders in Madagascar. I read about it in *Nature*, and went to see it in the American Museum of Natural History, New York. The project was conceived and led by Simon Peers and Nicholas Godley, using technology designed by French missionaries Jacob Paul Camboué and M. Nogué in Madagascar in the late nineteenth century. Delicately held in tiny 'stalls', the spiders – collected from telegraph poles by 70 local people – were 'milked' by hand each day and released. Each spider produced 80 feet of golden filament, which was spun and woven by local craftspeople over four years. It's an astonishingly beautiful, perhaps miraculous, work of art.

Whose art, though, is responsible for the tapestry? So many makers came together to spin this intricate traditional pattern from a natural substance stronger than steel, and a million of them were spiders. It's my metaphor for integralism, resilience and the cooperative values underlying sustainable living.

### Universal nature/human nature: the woven web

The Spiderweb Tapestry begins with the web itself, that global symbol of complexity and interconnection, and adds to it the specifically human dimensions of culture, tradition,

stewardship and imagination.

Produced with a combination of curiosity, imagination, great care, local knowledge and local resources, it is at once organic and mysterious, fabricated and wild, particular and universally evocative. It literally glows with the active participation of non-human forces. My metaphor seeks to develop and transform our sense of care in relation to both the human and the non-human world.

Only active, attentive and responsible stewardship of earth's living systems and the natural capital on which we rely entirely for survival will make the fabric we're woven into resilient enough to survive the shocks it's now subject to.

The Madagascan tapestry is a work of ethical ingenuity: drawing on the self-organising tendencies of the non-human world, it combines the exceptional capacities of human hands and human minds to create something much more valuable – in cultural and ecological terms – than the sum of its parts.

— Ruth Little, dramaturg and associate director of Cape Farewell

The Spiderweb Tapestry at the American Museum of Natural History. Photo: Godley & Peers.





'The kelo'. Photo: Amanda Thomson.

## The kelo

There's a Finnish word a ranger told me, *kelo*, which describes a tree which has died, dried out in the wind and yet remains standing, often for decades, only quietly and imperceptibly decaying.

Dead wood supports a huge amount of biodiversity when still standing, and once the *kelos* have fallen, they continue to form a crucial part of the living ecosystems of a pine wood. At each stage of their decay, they give something back to their surroundings and support different species at different stages of decomposition. When standing, they provide viewpoints for raptors and their holes and cavities provide nest sites for a range of woodland birds, including crested tits. Their rot holes are used by the larvae of rare hoverflies, green shield-moss grows on old stumps and capercaillie use the upturned root plates of the fallen for cover and for dust baths.

For me, these dead trees contain an essential reminder about how in both physical and in psychic terms, things that seem no longer with us, things that might appear to be useless and redundant, and things that become invisible can continue to influence, support and nourish the present, and the living, in ways that we might not yet know, but will perhaps, in time, come to realise.

— Amanda Thomson, artist and researcher

## Le Tour de France

The bicycle is a wonderfully efficient and ecological mode of transport; and the dynamics of professional cycling are a model for the cooperation that real sustainability will require.

No rider could win the Tour without his team. Despite the intense competition, and personal rivalries, there is a fundamental trust within the group of riders, the peloton, following a set of unwritten rules. But there is another side to cycling. Teams are reliant on their corporate sponsors, deals are done between riders of competing teams and doping blights the Tour. These problems strike right at the heart of a sport shot through with the ethos of teamwork and cooperation.

There is a temptation to 'cheat' with sustainability too: to greenwash and make token changes, but never integrate it fully into our lives and societies. But the cooperation that is central to professional cycling is also central to sustainability; as in a cycling team, one specialism will not be enough and, as in the peloton, we need to trust that others will also make the effort.

— Bradon Smith, research associate, Open University

## The fetch

The 'fetch' (length) of a wave can be incredibly long. For example, it could stretch from the east coast of the United States, where it might originate, and travel uninterrupted by land mass across the Atlantic Ocean, arriving on the shores of the west coast of Scotland, in particular the Orkneys, where it would then be forced to break against the coastline.

The simple equation relating to this phenomenon is that the length of a wave determines its power and energy.

The uninterrupted fetch length of a wave seems like a strong natural metaphor for cause and effect. The behaviour of oceans, seas and weather appear to override any political or territorial boundaries and constraints, reminding us of the larger rhythms of earth systems that can so easily be damaged and altered by different types of human-made pollutants.

'Fetch' can also mean 'to go and collect' and is to some extent predictive and about a future intention. Collecting and harnessing ideas and ways of living more sustainably would seem to be navigating in the right direction.

— Annie Cattrell, visual artist and senior research fellow



'The fetch'. Photo: Annie Cattrell.

## The dehesa

I first saw the Spanish *dehesa* on a trip to Extremadura some 20 years ago. We drove for over 50 miles without passing another car and the temperature soared to 53C.

Rather like the evocative Spanish term *duende*, used in the performing arts to mean 'soul' or 'spirit', *dehesa* is a difficult word to translate. Meadow, wooded pastureland and grazing operation, it is a silvo-pastoral system that covers 20,000 square kilometres, mostly in south-west Spain but also stretching into Portugal and Morocco. It is one of the oldest created landscapes in Europe – a cultural landscape if you like – just how ancient no one quite knows, but certainly several centuries, and it remains an outstanding example of intelligent husbandry. It is beneficial to the needs of human beings but also hospitable to a whole variety of other creatures, including many rare butterflies and acorn-fed Iberian pigs, and is the wintering ground for most of Europe's population of *Grus grus*, the common crane.

The *dehesa* is an area where maximum exploitation sits side by side with maximum conservation – and it is also incredibly beautiful.

— Alison Turnbull, visual artist

## A stranger's compass

Walking an unfamiliar Cumbrian fell with a compass, often without a map, links me to the land in a special way. The invisible, magnetic north that spins into place on the device is often perplexing and counter-intuitive. However reassuring it is to know there are vast forces of geology beyond any I can see, I still have to negotiate the land right in front of me: that granite face, that swamped mire, that fast river. There is no picture in which to find myself, only wit, the land and the pull of a distant polar force.

A few times, I've come across a dropped compass. There's a moment, clearing the mud from its face, when I wonder whether it was left behind because it was broken, or not believed. Is the north that was found in a stranger's hand the same as in mine?

I don't think sustainability can be likened directly to a compass, as if there was a pole of certainty to it. There are orientations that guide, but they fluctuate with a landscape that is continually shifting. The incremental decisions made in response to immediate conditions themselves change the situation, alter what is possible to do. I see sustainability as a response to change, one that keeps alive the capacity to respond to further change. What kind of compass would show this light-footed improvisation that makes sure those in the future can navigate their own way?

Walking with a stranger's compass comes closer as a metaphor. The compass is given, handed over, and it connects me to those I will never know, while helping me cross the land that I am in. The instruction is not reliable; maybe not safe. Or maybe it is, and the coordinates are sharper than on my own compass, signalling a clearer route. Is it pulling me in a direction I couldn't have imagined?

One day, I'll leave my compass behind.

— Wallace Heim, writer and co-editor of the Ashden Directory

### 'Come into my house'

I made my metaphor in my house. The camera is out on the street and I open each door/window in turn and call out for various thinkers to 'come into my house'.

As an artist, I am more interested in restoring richness to the 'cult' of everyday life and in incorporating the force of poetic imagination than in reflecting/interacting with culture at large. My metaphor therefore reflects this sensibility.

I suppose the only thing someone like me at this point in the environmental direness of 2011 can do is to come back to the doorstep, where the agency of the single being starts, and to call for the paradigm shift in our thinking that might finally allow us to dwell as an act of loving the world.

Deleuze, come into my house  
 Heidegger, come into my house  
 Badiou, come into my house  
 Plato, come into my house  
 Spivak, come into my house  
 Diogenes, come into my house  
 Agamben, come into my house  
 Nietzsche, come into my house

— Hester Reeve,  
 artist and lecturer



'Come into my house' (DVD). Photo: Hester Reeve.

### A family of metaphors



The Institute for the Art and Practice of Dissent at Home.

**water on a fire:** The world is big plank of wood and it's on fire. The only thing to save it is water. Sustainability is water – that's what it is. (Neal, 10)

**helping turn the page:** The world is a big round book, but it needs help to turn the next page, it can't do it by itself so we all have to help the big book turn its next page. That's sustainability – helping to turn the page. (Gabriel, 8)

**a child asleep:** Sustainability is Sid asleep, rapid eye movements, visceral dreaming, thoughts shooting round his brain, wiring and rewiring the connectors in his head, trying to sort out what happened today ready for some sort of tomorrow. (Sid, 3, asleep)

**the family:** The queer family, the radical family, the family that doesn't depend upon or nurture the endless reproduction of repressive ideologies. Rather a family that depends – indirectly – upon reproduction of itself with difference. It happens through friendships, encounters and love affairs.

It's the indirectness that is crucial, the indirectness at the heart of all family-making. I won't suffer climate chaos in Bangladesh or the terrible local effects of the Alberta Tar Sands extraction, except indirectly. How can everyone act in solidarity with other people? The indirectness is what stops us. We have to embrace the indirectness, like we embrace the difference that is produced in our kids every day as they grow away from us. It's the only way to be happy in the long run.

The relationship between me and my kids is the best metaphor I have for sustainability. Maybe because it's not even a metaphor but a living, loving struggle. (Gary, 39)

**failing better:** Sustainability is allowing difference, allowing impossible encounters to take place and surprise you. Sustainability is getting out of the box you are in, getting out of networks you belong to, seeing beyond your own group. Sustainability is learning a new language, but a really new language, a new method, a new skill. Sustainability is the provocation that stops you being righteous.

Fail. Fail again. Fail better. Go for the impossible. (Lena, 36)

— The Institute for the Art and Practice of Dissent at Home: a family of two adults and three children living in Everton, Liverpool

## The yew tree

There's something not real about the word 'sustainability', implying the possibility of being liberated from death. But also there are nurturing, practical, organic aspects to the word, implying maintenance and growth.

Trees are living processes. It is estimated that the Llangernyw Yew, in Conwy, Wales, is over 4,000 years old. It sheltered people from the early Bronze Age. It is tempting to think that one of those people stood under the tree imagining life 4,000 years in the future. Yews represent the passage from life to death, and beyond, into the land of shadows.

The timeless quality of yew trees can also be personally experienced. Stepping into the low-hanging canopy of a yew, the air is cool and still, a natural sanctuary in which to reflect, to slow down and contemplate life beyond the moment.

This is an uncertain world. In past centuries, when death was a more present, daily occurrence than it is now, maybe yews gave people hope that the world will continue. Hope that although one day we will die, part of the world we knew and loved will sustain.

— Peter Harrison, artist

All the metaphors for sustainability, the contributors' biographies, Hester Reeve's film 'Come into my house', and a film of James Marriott, Carolyn Steel, Zoë Svendsen and Ansuman Biswas describing their metaphors can be found on [www.ashdendirectory.org.uk](http://www.ashdendirectory.org.uk)



'The yew tree'. Photo: Wallace Heim.



# ESSAYS

## Confluence: music for the river

As a director of Common Ground, Sue Clifford encouraged celebration as a starting point for action to improve the quality of everyday places. In 2000, she was working on *Confluence*, a project that brought people together to make music for the River Stour.

Above, a buzzard flies over the edge of town. I am mid-country – on the line. Further east no buzzards, but to the west more. There is another fault line here – chalk and cheese. The saying is supposed to come from the lush vale of clay supporting fine milch cows and the downs around offering quite other prospects. Great hill forts steer the chalk hills round the sodden vale, beacons disguised as trees beam wearying messages about.

A town of green sand stands high above villages of brick and yellow stone, awaiting the arrival of trucks bigger than cottages which keep its high street alert to corporate dangers. Badgers clean out their older hamlets in the evening dark. Worms, having read their Darwin, continue making the history of the world, unaware that they loom large as breakfast for the brock, and feature little in strategic deliberations about sustainability.

And our deliberations spool around the smallest and largest questions. Why do badgers matter? How do we create a culture of wanting to care? How do we nurture a new mutuality between nature and culture?

Emerging from an imperative in ecology, Common Ground set out to explore the arena where nature and culture meet, and to excite people to stand up for their own surroundings. So much of the environmental action we had personally been part of had become embattled, simplistically scientised, more and more about the rare, the endangered, the spectacular, the exotically exciting.

Our arguments began to coalesce around the ordinary. This is where most of us live our lives, where most of nature is, and unless we look after the ordinary, the rare cannot survive. Unless we do something for our own places and to change ourselves, how can we expect others to change their expectations?

We have tried to give people courage to make a start from where they are and what they know. We are concerned to encourage people to animate their values, to make demonstrative efforts to communicate what is significant in their surroundings and to be tolerant of other people's values. Everywhere means something to someone.

In the south-west, Common Ground has pioneered a project encouraging people to create music for the River Stour as it rises through Somerset and Wiltshire and flows southward through Dorset to the sea. We hope it will give everyone ideas. *Confluence* has already brought into existence river carols written and sung by a new community choir; watery ballads performed in village hall, library and pub; the Fish Cabaret (with teenage a cappella group, school jazz band, a singing fishmonger); storytelling particular to this river;

music for a bridge played by a scratch group – the Cutwater Band. And our composer-in-residence on the River Stour, Karen Wimhurst, has created lots of new music – spoken histories literally interwoven with a new composition for wind instruments, an experimental piece mingling the sounds of a working mill with percussion and voice, pieces for wind players, percussionist and plumbers on new musical instruments made from plumbing artefacts for a challenging concert based around readings which animate the little rivers which run through your house.

Impelled again by ecology we are encouraging the names of brooks to be carved onto their bridges with the idea of getting local groups to search out elusive names, to take on the naming using an alphabet especially created for their valley, so every bridge within the catchment using this letterform lets you know which river basin you are in.

Here in Shaftesbury, high above the Stour, everything is drying out after the wettest April on record, a few swallows are arriving, and for the moment, the continuing privilege of living with badgers symbolises a quiet tolerance and care which may have lasted for longer than a thousand years.



Bridge: Common Ground.

## The allotment with roots in every classroom

In 2003, Clare Patey and Cathy Wren created *Feast with Rosendale Primary School at the Rosendale Allotments*. The year-long project brought together children, artists, food, the outdoors and the curriculum. Eleanor Margolies paid a visit.

If you cross the road from Rosendale Primary School in south-east London, unlock the gate to the Rosendale Allotments and climb Knight's Hill, you enter a world of patchwork gardens. One plot is striped with raspberries and currants; another is occupied by bee hives. Some gardeners grow sunflowers, roses, courgettes, sweetcorn and sweet peas. Others specialise in cabbages, or plants from Madeira. On one allotment, a bathtub overflows with mint; on another, a flask of tea sits beside an old wooden chair.

A class of five- and six-year-olds arrive at the allotment. Their teacher says: 'First of all, look around and see what's changed since you were last here.' The children move between the raised beds, spotting fist-sized pumpkins hidden under enormous leaves and the pale green marbles of new tomatoes that have replaced the blossoms, and take turns to point out their discoveries to the whole class. There are gasps of surprise as a girl splits open a pod to reveal a row of peas.

The children divide into groups to weed, water and harvest. They gleefully unearth potatoes and lever carrots from the ground with determined effort. At the end of the lesson, they carry the produce back to school where they will cook and eat it.

This is Rosendale's second year on their allotment. It all started with *Feast*, a year-long project designed and organised by the artists Clare Patey and Cathy Wren through the London International Festival of Theatre (LIFT). The whole school was involved in creative activities led by visiting artists, while a small 'core group' of children worked closely with Catriona Andrews, a professional gardener.

The first public event was an open evening for parents and children, with a tasting of vegetables, to help decide what to plant, and a pooling of ideas about seasons and special days. Then artist and illustrator Sophie Herxheimer took up temporary residence in a shed on the allotment, keeping a visual diary of developments.

At the summer solstice, children made ceramic plates with sculptor Martin Brockman, to be fired in a kiln shaped like a lion. They decorated fabric using vegetable dyes such as turmeric and beetroot with textile artist Madhumita Bose, and parents stitched the panels into tablecloths.

In performance workshops, theatre director Mark Storer prepared the children for their role as hosts. Meanwhile, chef Ken Hawkesworth led cookery workshops and planned a menu with the school's catering manager.

The year of creative, culinary and horticultural work culminated in a feast in which these elements came together. Over two nights, 400 people enjoyed a meal cooked with ingredients grown on the allotment. Tables were laid over the raised beds, labelled to show what once grew beneath the guests' feet; children served soup (from watering cans), ratatouille, strawberries, raspberries and bread that had been baked in ovens constructed on the site. A choir sang a specially-composed grace.

Throughout history and in every culture, the turning of the seasons has been marked by communal feasts. Through *Feast*, these city children experienced food, their environment and the seasons in new ways: tasting unfamiliar foods, learning how long it takes a tomato to grow, creating a festival, and witnessing the cycle of growth from seed to plant to flower to seed.

A year on, this project has spread throughout the school, establishing roots in every classroom. The school's environmental co-ordinator, Olivia Greenaway, says that the allotment is now seen as 'part of the school' and she has plans for next year: she wants to grow flowers alongside the vegetables and to find ways to hold more lessons outdoors on the allotment, where primary science curriculum topics such as 'habitat' or 'eat more fruit and veg' can come to life. Children who were once astonished by the dirt on freshly-pulled carrots now relish raw beetroot, encouraging each other to taste new foods.

For the 'core group' of children, working on the allotment was very different from school work: they gardened alongside others of different ages, in the open air; the work was physical but required care, patience and thought. Many gained confidence simply by getting to know others of different ages. Clare Patey feels the conversations that took place as the children weeded were 'some of the most important experiences of the year'.

The *Feast* project was a rich experience for a small group of children and a year of creative excitement for hundreds more. The children who work on the allotment now talk about the purpose of compost, wash carrots in a water butt and pick a few late strawberries. There is a sense of absorption and observation alongside silly jokes and groans about hard work. They spot butterflies and caterpillars, compare the taste of the spinach this week to that of two weeks ago, and bury their hands in the soil. One boy is enjoying his first experience of digging. 'I want to have a garden with weeds,' he says.

The Rosendale experience shows that nature can be experienced in the heart of a city. A local allotment also creates new connections with the community. Neighbouring plot-holders of different ages and backgrounds greet the children, comment on the innovations and offer advice. The allotment has become part of the children's world.

Feast  
Bakery



## Reading the environment in Ibsen, Chekhov and Brecht

How did Ibsen, Chekhov and Brecht place humans (and other animals) in the natural environment? Robert Butler and Wallace Heim explore the work of three major playwrights.

### *The first laboratory animal on stage*

Reviews of Henrik Ibsen's *The Wild Duck* often focus on the dilemmas and conflicts of human relations. Another, highly relevant aspect of the play usually passes unnoticed: its commentary on the way humans regard animals.

The semi-domesticated animal has an important role beyond mirroring the fate of the human characters, according to the philosopher H. A. E. Zwart. In his 2009 essay, 'The Wild Duck and the Origin of a New Animal Science', he argues that what is staged in *The Wild Duck* is the struggle between a scientific and a romantic perception of animal behaviour that continues to influence contemporary debates about animals in research.

*The Wild Duck* was written in the 1880s when the scientific practice of observing animal behaviour under artificial conditions was emerging. Under those conditions, often in private rather than institutional settings, the animal's environment and behaviour were reduced to separate and modifiable elements. What happens to the wild duck on stage is similar to what was happening to other animals. Scientific practice was altering the ways in which animals were viewed.

The contrasting romantic perspective values animals as being at one with their natural surroundings. As expressed in the play, the animal taken from its natural environment loses its dignity and its mystery as it becomes domesticated and docile. The disconnection of the animal from its natural surroundings is seen as a form of violence.

This conflict between romantic and scientific perceptions of the animal and animal-human relations as first expressed in *The Wild Duck* continues to be a backdrop to current debates on the well-being, integrity and death of animals used in research.

— Wallace Heim

### *Chekhov the proto-environmentalist*

In *Reading Chekhov* (2001), one of the best recent books about the playwright, Janet Malcolm considers Chekhov's green credentials. Her discussion centres first around the character of Astrov in *Uncle Vanya* who worried that 'beautiful landscapes are disappearing forever'. Astrov is an environmentalist, in Malcolm's words, because of 'his concern about the destruction of the Russian forests and for his remarkable grasp of the principles of ecology, decades before the term came into use.' Malcolm quotes the critic A. P. Chudakov who wrote that Chekhov was 'the first writer in literature to include the relationship of

man to nature in his sphere of ethics'. Malcolm suggests that Chekhov was a poet of the domesticated landscape rather than of the sublime. He was drawn more to shady old gardens than the great wildernesses. 'Chekhov hated theatricality', Malcolm writes, 'and was evidently as uncomfortable with nature's histrionics as with man's.'

In Una Chaudhuri's penetrating 1994 essay, "'There Must Be a Lot of Fish in that Lake": Toward an Ecological Theater', she argues that Astrov's position is one of 'resourcism' or shallow ecology, where nature is seen as providing materials that can be transformed into commodities.

In *The Seagull*, by comparison, Chaudhuri sees the staging by the side of the lake of Treplev's ill-conceived play as an example of the disjunction between culture and nature. After seeing the play, the sympathetic Trigorin can only say, 'the scenery was very beautiful'.

Perhaps this is how Chekhov is to be viewed today. He is not an Astrov, who sees how the forests can be turned into engines of progress. Nor is he a Trigorin, simply admiring the landscape. Rather, as a dramatist, he is highly alert to the collisions in our lives between nature and culture.

— Robert Butler

### *If Brecht were alive today, what would he be writing about?*

At the Ashden Directory's round-table discussion in 2005, Caspar Henderson claimed that if Brecht was alive today, he would be writing about climate change (see 'Why are there no plays about climate change?', page 49). This leads to the questions, 'Do we need Brecht?' and 'Do we need *a* Brecht?' One way to consider these questions is to ask what Brechtian theatre has to offer theatre-makers working with environmental themes. Another way is to take a longer view, seeing something more radical suggested by Brecht that may inspire an environmental reinvention of theatre.

In Brecht's own writings about theatre, his forcefulness and direction was towards changing human society, towards educating an audience and providing entertainment. Science was a source of fascination, as seen in his play *Life of Galileo*. For Brecht, the sciences held a potentially liberating power for humankind if their methods and rationality could be applied to human affairs. As to nature, the sciences made the alteration and exploitation of nature possible in order to make the planet a 'fit' home for 'mankind'. Nature was a resource for scientific and technological experimentation, a treasure to be exploited which, in a Marxist society, would benefit all of humankind, not just those social classes which controlled nature and industrial production. Even Brecht's theoretical work, *A Short Organum for the Theatre*, is named after Francis Bacon's *Short Organum* in which he advocates 'wringing from Nature her secrets...to make practical use of them'.

So it seems that Brecht's views of nature are at odds with environmentalist views. But, as Brecht's theatrical methods have permeated political theatre in the second half of the

twentieth century, could these be adaptable tools for making works which propose to change an audience's perceptions about nature, to change their habits and assumptions about the environment?

Most theatre endeavours to make the familiar strange. Brecht did this differently. His 'estrangement effect' appealed to reason, intending to produce a critical attitude in the spectator, distanced from any feeling of empathy with the characters of the play, in order that one could see the real motives and forces behind what was socially unquestioned. Brecht attempted to exclude emotion in favour of reason and 'objective facts'. Epic theatre was supposed to force the spectator to consider other possibilities than those expressed in the theatre of the day, and to expose the contradictions and power struggles hidden in bourgeois society. Brecht brought together the events and actions of the everyday with the current political theories and movements of the time.

Some of Brecht's methods might be made appropriate for environmental works, in the same way that a writer and director may borrow from other genres, traditions and conventions, like the thriller, the docu-drama, or narrative realism. The hazard is that stripped away from Brecht's immediate passions, they become tools for didactic theatre, showing a view of nature based mostly on information, politics and science. This theatre can miss out what makes questions about nature so vital, nuanced and imploring.

Brecht had Marxism as a theoretical basis, and confined his works to human social relations. Human relations with nature do not have a single theoretical basis, and the experiences, emotions and perceptions involved are different and differently complex than those Brecht explored. And environmentalism now is re-configuring politics, global power and private feelings.

Brecht offers us an extraordinary example of how to take theatre into new and necessary realms. Brecht could not express what he wanted to express in the theatre of his day. So he changed theatre.

To express what must be expressed about human relations with nature could mean reinventing theatre, and that could change both how theatre is made in the twenty-first century and how people respond to the environment in their everyday lives.

Brecht didn't work alone, and it may be now in collaborative working that new forms emerge. A changed theatre may take place in small ways; it may show itself firstly in the mainstream; it may take many shapes, not just that developed by one director.

So, as Brecht changed theatre to express what needed to be expressed, if he was alive today, he might be making environmental performances. But the theatre reinvented may not be his theatre. Brecht left the door open for future change, writing in the *Short Organum*: 'There are many conceivable ways of telling a story, some of them known and some still to be discovered.'

— Wallace Heim

## Making music with other species

Jazz musician, composer and professor of philosophy, David Rothenberg plays and improvises music across species boundaries. In 2005, he wrote for the Ashden Directory on playing clarinet and saxophone with birds; in 2008, he was interviewed about his experience of playing music with whales. These themes are explored in his books *Why Birds Sing* (2005) and *Thousand Mile Song* (2008).

### *Improvising in the aviary*

I met my friend Michael Pestel at the gates of the National Aviary in Pittsburgh, a mostly forgotten federal institution in a rundown neighbourhood. Pestel told me what a great place it was to jam with the more-than-human world. Plus, the human staff were friendly; they liked to let musicians in during the early hours before the public storms the gates.

If the voice of an animal is not heard as message but as art, interesting things start to happen. Nature is no longer inscrutable, some alien puzzle, but instead something beautiful, a source of exuberant song. Call the sounds of birdlife music and there's a place for humanity within them. Call them language and it's all mute, untranslatable, a foreign tongue with no one around to translate for us. But what if we take the more intuitive approach of hearing it all as music?

Pestel is there with his flute and various homemade stringed instruments. I have clarinets and saxophones. In the Rain Forest room, we are engulfed in humidity. It swelters. The birds are at first sluggish, but as we play they dart all over the place. These tropical types are agile, instantly melodic.

'Ba ba bu ba pe pa,' goes a bright yellow *Spreo superbus*, the superb starling, a clear pentatonic scale. Magnificently clear, five open tones. It's an open invitation to us wind players.

Soon he's eclipsed by the Indian shama thrush, *Copsychus malabaricus*, a virtuoso mimic and explorateur. One new phrase after another. Anything we play is just raw material for him. An orange mockingbird of the tropics, nothing fazes the guy, he keeps coming back with a new variation. He's not stuck in a rut. Whatever we feed him he can use and transform. Every song he sings seems brand new.

Pestel and I move slowly through this man-made forest, looking, listening for particular birds who were ready to interact with us, to take us seriously as singers in the dawn chorus. In front of one thicket, I play a few notes. All of a sudden a strong, melodic outburst comes out. Who calls in there? He's grey, black and white, robin-size, hopping, dancing around like mad. I keep playing, he's responding. At first he comes back at me with rising arpeggios, strong and tough. I play back. He cocks his head, leaps to join in. My notes change. His notes change. There seems to be some real camaraderie here. But what is the

message? If it is music, the message matters far less than the sound. Do we go somewhere together that we couldn't go apart?

A woman walks by pushing a huge mop, swabbing the place down. Terry Lunsford looks up with a smile: 'Are you getting it on with my man up there?' she asks.

'Yeah,' I say, 'Who is that?'

'That's a white crested laughing thrush, *Garrulax leucolophus*.'

'Oh yeah?' I laugh, and the bird laughs some more, but his laugh is a melody, a saxophone laugh, a Charlie Parker laugh. We all laugh.

Pestel comes by with his flute. He's amazed, never heard this particular bird take off before. We get it all down on tape. I listen to the tape later at home. It's more musical than a lot of jams I've done with humans, that's for sure. In their native Moluccan Islands, these laughing thrushes go around in noisy, cackling groups of one or two dozen birds out in the wild, mostly hillside areas of south-east Asia. Their sound is generally considered a call, with specific social functions, rather than any kind of purely melodic song. Does this mean my bird was trying to tell me something specific, like to get me into his group or to get me out of his world? He seemed to live on his own, apart from any other members of his tribe. Perhaps he was lonely. Or maybe the distinction between song and call is not so clear when a bird is confronted with a strange alien music? This guy's sounds were definitely changing in relation to mine. Something was going on.

Later I do some research and discover that only two scientific papers have ever been written on this cheerful beast. Turns out this is one of those species where both males and females sing, reaching for each other in sound to give voice to their togetherness in a wild, noisy world. When he heard me, who did he think I was?

Hear bird sound as music and there is always some mystery to enjoy. Hear the whole world as music and you'll find we live inside a plethora of beautiful sounds. If the natural world has a place for us then humanity will no longer be able to destroy this beauty blindly. See, playing music with birds does have its lesson. It teaches us to strive for the collaborative creativity possible with the other inhabitants of this fabulous planet. How many other creatures out there are waiting for the chance to jam?

#### *Talking about whale music*

People have thought about birds and music for thousands of years, but with whales, it's only been about 40 years. You can trace the moment when it happened. The humpback whale's song was discovered by Roger Payne and Scott McVay in 1971, and the song catapulted into people's concerns. The discovery of the humpback whale's song was one of the driving forces of the environmental movement. There is one thing that confuses the whole story, though, which is the fact that if you dive under water, you can also hear them. So why did no one notice this before the 60s?

The story in all the books is that you need an underwater microphone, a hydrophone, to hear the whales singing. But if there are enough whales, and you're close enough, you can hear them when you're swimming under water. I've heard it. It's faint but it's there. Why didn't anybody talk about this? It's as if you have to want to listen before you can hear. You have to decide that there's something worth hearing down there.

Humpback whales change their songs. They learn new songs and communicate what they've learned to each other. They're all singing the same song, and it sounds like they're all singing together, but no singing whale is closer than one kilometre to another singing whale. As the weeks, months and years go by, they all change their songs in tandem, so they are usually singing the same song. We don't know why they change their song when they meet new whales, and why they'll change so that they all sound the same. Nobody really knows what whale song is for because there is no clear evidence female whales are listening to this, even though it's only the male whales that sing.

The idea that the whale might listen to a human clarinettist and interact is fascinating. We don't know what music means, even though it's very meaningful. It communicates and it connects people. You can play music with someone who doesn't speak your language and you can make something interesting together. So why can't you do that with another species? You don't know what they're thinking but perhaps music can cross species lines more than language can.

Playing with a whale feels like being on the edge of some new possibility, something beyond the human world. We are amazed by communicating with animals, by the possibility that you can reach this other consciousness.

There is something special about jazz improvisation that allows this to happen. Jazz is open. It's always been able to welcome different kinds of music in. If you believe that music can be spontaneously created by people who don't always know what's happening, then you'll believe that you can make music with creatures you don't quite understand. With improvisation, it's a question of what can be conveyed in the moment and developed, how you are spontaneously inspired by something that you've heard or thought about.

John Cage has been influential for me. He said he preferred nature to music and that music operates like nature. I love that idea – though it does go all the way back to Aristotle. Figure out how nature works and try and work that way. Of course, one of the ways that nature works is that we can't quite figure it out, and that is an important part of my approach. We don't know how it all fits together. The uncertainty has to be there. That's one of the ways to imitate nature and its manner of operation. To do things that you can't quite explain – that's what improvisation is really about.

## The first climate change opera

A political mystery tour for one person equipped with an mp3 player, the opera *And While London Burns* (2006) takes Robert Butler through the City of London to reveal a web of interconnected corporations and institutions.

You're sitting at a table in Starbucks in the City of London when a female voice whispers into your ear, 'Hello. I'm your guide. Follow me.'

It turns out this seductive guide has a very specific tour in mind. 'I will take you to fund managers, banks, insurance companies, lawyers, advertising agencies and recruitment agencies...'

The guide (played by Josephine Borraile) is one of the three main characters in a remarkable audio opera *And While London Burns*. The opera is composed by Isa Saurez and has a libretto by John Jordan and James Marriott. From a table in Starbucks, you will follow an hour-long route round the city. You may only ever be a few hundred yards from Bank tube station, but the opera will take in Azerbaijan, Bangladesh, the Niger Delta, Algeria, Iraq, Siberia and the Gulf of Mexico.

The guide coaxes you up the escalator, along the pavement, and across the road. 'See the little birch tree there ... turn left.'

That pink building, you soon learn, is Morley Fund Management, which has £165 billion to invest. Yes, that's billion pounds. It holds 2.1 per cent of all BP's shares. The building opposite, next to the Roman ruins, is the Sumitomo Mitsui Banking Corporation. It provided a loan of \$143 million for BP's massive gas scheme in West Papua. As you stand in the shadow of these prestigious offices, a children's choir sings in your ear about a warming world.

The opera's central character, never named, is a fund manager in his 40s, played with fierce, edgy intensity by Douglas Hodge. A frayed, exhausted figure, his journey through the city relives the end of his love affair with a climate scientist, Lucy (Deborah Stoddart). It also charts his growing despair at the short-sightedness of his work in the city.

The opera's multiple soundtrack interweaves his story with Saurez's haunting choral refrains, factual observations from the guide, and the ambient city sounds of footsteps, car horns, planes flying over, PA announcements and the clatter of cutlery in restaurants.

The first pleasure in following *And While London Burns* is the serendipitous one of surrender. Nearly everyone else in the city at lunchtime is hurrying purposefully from office to sandwich bar and back. But you are a tourist, cut free from those pressures, with no idea where you are about to go, and with only some voices as a lifeline.

The second pleasure is one of discovery. 'See the gap in the black marble wall on your right,' says the guide, 'Step into it and start climbing the stairs.' You head down corridors, peer into buildings, and find out what happens the other side of the tinted windows. The journey becomes a magical mystery tour, a London walk, a political essay, a short story and a requiem.

Gradually, the pieces pull together. As you move from Morley to Sumitomo, from the Royal Exchange to Deutsche Bank, from the Gherkin to the Lloyds building, you hear how money and influence flow from one institution to another. To give a single example: the chairman of BP sits on the board of the Royal Bank of Scotland and the chairman of the Royal Bank of Scotland sits on the board of BP. In 2004, RBS loaned BP \$100 million dollars to help construct the Baku-Tbilisi-Ceyhan pipeline. This is what the librettists call 'the carbon web', the intricate pattern of alliances that centres around 'black gold'.

Jordan and Marriott are in no doubt that the same oil industry that builds the skyscrapers and pays the city salaries also threatens communities in the developing world and produces the mountains of exhaust that drive climate change. The bitter irony is that many of the people who know the most about the dangers of climate change are insurers working inside the Gherkin. To meet the insurance claims that arise from the results of climate change, the opera tells us, they are investing in the very things that cause those insurance claims.

*And While London Burns* offers an intriguing tour of these high-tech buildings, which registers the global effects that flow from decisions that are taken within them. As protest art, it is highly imaginative, serious and timely.



## Old tales, fresh takes (I):

### Erysichthon and the sacred tree

The editors of the Ashden Directory asked two storytellers to retell an old tale with contemporary environmental resonances. In the first of these stories, Kevin Graal looked to Greek mythology for a story of how we are consuming ourselves.

King Erysichthon despised the gods and one day tried to cut down a grove of trees sacred to the earth goddess Demeter (also known as Ceres). In this grove there was a towering, venerable oak, on which votive garlands were hung and inscriptions carved expressing the gratitude of suppliants to the nymph of the tree.

But Erysichthon saw no reason to spare it and ordered his servants to cut it down. When he saw them hesitate he snatched an axe from one of them. His first blow hit the trunk, the oak shuddered and groaned and blood flowed from the wound. From the midst of the oak came a voice, 'I who dwell in this tree am a nymph beloved of Demeter, and dying by your hands forewarn you that punishment awaits you.' At last the tree, suffering repeated blows, fell with a crash.

The dryads were dismayed at the loss of their companion. They went to Demeter to ask for Erysichthon to be punished. Demeter agreed and planned as punishment that she would deliver him over to Famine.

Demeter herself could not approach Famine, for the Fates have ordained that these two goddesses should never come together. So she called an Oread from her mountain and sent her on dragons and chariots to the farthest part of ice-clad Scythia, a sad and sterile region without trees and without crops. Cold dwells there, and Fear, Shuddering and Famine. The Oread found Famine in a stony field, pulling up the scant herbage with her teeth and claws. Her hair was rough, her eyes sunk, her face pale, her lips blanched, her jaws covered with dust, and her skin drawn tight, so as to show all her bones.

Famine obeyed Demeter's commands and sped to Erysichthon's bedchamber, where he was sleeping. Famine enfolded him with her wings and breathed herself into him, infusing her poison into his veins. Having discharged her task, she returned to her land. When Erysichthon awoke, his hunger was raging. Even when he was eating he complained of hunger. The more he ate the more he craved. His hunger was like the sea, which receives all the rivers, yet is never filled; or like fire, that burns all the fuel that is heaped upon it, yet still has an appetite for more.

Erysichthon's wealth rapidly diminished under his unceasing demands for food, but his hunger continued unabated. At length, he had spent everything and had only his daughter left. She, too, he sold. His daughter resisted being sent away as a slave on a



'Erysichthon cutting down the sacred tree of Ceres', Crispin van de Passe the Elder (1564-1637).

ship, and prayed to Neptune. He heard her prayer and changed her form into that of a fisherman, deceiving her would-be master. When she resumed her own form, her father was pleased to find her, and sold her again. But as often as she was sold, she was changed by Neptune; now into a horse, now a bird, now an ox, and now a stag, always escaping her purchasers to come home. In this way, the starving father procured food, but never enough for his appetite.

Finally, hunger compelled him to devour his own limbs and he strove to feed his body by eating his body. Only death relieved him from the vengeance of Demeter.

This retelling is based on a text by the American writer Thomas Bulfinch (1796-1867) in his *Age of Fable* (1855).

## Faust, Cassandra or Sally Bowles?

For many, the character of Faust epitomises a contemporary response to climate change. In 2007, Robert Butler suggested other dramatic characters in whom we might recognise ourselves and the way we think about the present moment.

Each chapter in George Monbiot's book *Heat – How to Stop the Planet Burning* (2007), has an epigraph from either Marlowe's *Dr Faustus* (c.1590) or Goethe's *Faust* (1790-1832). The first quote from *Dr Faustus* establishes its pertinence: 'The God thou servest is thine own appetite.'

Georg Faust was an early sixteenth-century German magician and astrologer. After his death in 1540 or 1541, he quickly passed into legend. In Marlowe's play, Dr Faustus strikes a deal with the Devil's servant Mephistopheles. He will be given 24 years to 'live in all voluptuousness' if, at the end of that period, he surrenders his soul to hell. Mephistopheles explains exactly what the consequences will be, but Dr Faustus refuses to believe him. Monbiot writes, 'You could mistake this story for a metaphor of climate change.'

Several of Cassandra's remarks in Aeschylus's *Oresteia* are equally apposite. Cassandra has the gift of prophecy and foretells the invasion by the Trojan horse, the death of Agamemnon and her own end, but is not believed. Until very recently Monbiot, along with many other climate change activists, must have felt like echoing Cassandra's words: 'Man? You are lost to every word I've said.' As the scientific evidence mounted over the last decade, he might also have been tempted to quote her warning, 'No escape, my friends, not now.'

Another strong contender as a classic text for climate change is *Cabaret*, the Kander and Ebb musical based on Christopher Isherwood's novel *Goodbye To Berlin*, published in 1939. The action takes place in Berlin in the early 1930s. In the foreground, there's the Weimar world of hedonism; in the background, there's the ominous rise of Nazism.

A number of commentators on climate change have alluded directly or indirectly to the second world war. Al Gore writes in *An Inconvenient Truth* (2006), 'There was a storm in the 1930s of a different kind: a horrible, unprecedented gathering storm in continental Europe.' Gore quotes Churchill, speaking in 1936: 'The era of procrastination ... is coming to its close. In its place we are entering a period of consequences.' NASA scientist Jim Hansen has wondered whether Americans in the future will have to deal with a legacy of guilt, as Germans have done in our own time.

In one of the most pertinent exchanges in *Cabaret*, the party-loving Sally tells Cliff that she's going back to work at the Kit-Kat Klub. 'Isn't it heaven?' Cliff doesn't think so. 'You know, Sally, someday I've got to sit you down and read you a newspaper. You'll be amazed at what's going on.'



Lilo Baur as Cassandra in the National Theatre production of *Oresteia* (2000).

Photo: Ivan Kyncl/Arena PAL.



*War Horse* at the New London Theatre. Photo: Brinkhoff Mögenburg.

## Animals on stage: what could be more natural?

In contrasting ways, *Rhinoceros* and *War Horse* question the boundaries between the human and the animal. Eleanor Margolies discusses two London productions from 2007 that use different theatrical strategies – animal observation, physical characterisation, mask and puppetry – to represent the natural world.

Someone has let the animals loose on stage. At the Royal Court, Ionesco's play *Rhinoceros* demands a herd of rampaging rhinoceroses, while *War Horse*, Nick Stafford's adaptation for the National Theatre of Michael Morpurgo's novel, has a horse at its emotional centre.

Both of these productions involve research into animal behaviour, but with quite different emphases. In *Rhinoceros*, realistic masks and a life-size puppet are combined with an expressionist transformation of the actor's body and movement. In *War Horse*, animal observation determined the design and movement of the life-like but non-realistic animal puppets who perform alongside the humans. Both productions question our understanding of the boundaries between animal and human behaviour. As respectable townfolk become stampeding beasts, one man asks rhetorically: 'What's more natural than a rhinoceros?' Another anxiously responds: 'Yes – but a man turning into a rhinoceros – that's unquestionably abnormal.'

The *Rhinoceros* company watched videos, contacted the campaigning organisation SOS Rhino, and took a field trip to Colchester Zoo. Actor Zawe Ashton saw an image from the play reflected in the rhino's physiognomy: 'a huge, glazed eye, lost in the armour of the body', as if a human being were trapped inside. But for another actor, the rhinoceroses were 'a bit too sweet... too cuddly'.

The actors' observations – and their empathy for the animal Other – had to be converted into a theatrical movement vocabulary. Working with director Dominic Cooke and movement director Sue Lefton, the actors explored ways of changing the alignment of the spine and their gaze.

As 'Jean', Jasper Britton transforms himself in the course of a single scene from a man with a sore head to a furious animal. He directs his face straight downwards to the floor, his bare shoulders round so that his back becomes barrel-like, and his legs propel him powerfully towards a wall. Stopping just before he crashes into it, he trots on the spot, as if puzzled by this inexplicable barrier. He seems to be trying out a new physicality as he argues for a new philosophy of nature: 'Don't give me moral values – I'm sick of moral values ... We need to rediscover our primordial wholeness.'

Jean's transformation is aided by make-up and a series of masks, until at last he crashes through a wall as a full-size rhinoceros. The combination of physical acting with realistic masks and puppets makes his transformation from human to rhinoceros believable. At the

same time, it seems to be the result of an act of will. As is said of another character: 'Maybe [he] felt he needed to let go after all those years behind a desk.' Ionesco's exploration of this desire to 'be natural', to put aside moral scruples and join the herd, takes the play beyond surreal fantasy to imply a political dimension.

In contrast to *Rhinoceros*, *War Horse* draws attention to the otherness of the horse rather than to the possibility of humans becoming animal. The young hero's mother tells him: 'You should never talk to horses, Albert ... They never understand you. They're stupid creatures. Obstinate and stupid, that's what your father says, and he's known horses all his life.'

*War Horse* is a collaboration between the National Theatre and the South African puppet company Handspring, founded by Adrian Kohler and Basil Jones. The movement of Handspring's puppets – from a gawky stiff-legged colt to full-grown horses that stretch their necks, rear up on two legs and even carry human riders – is breathtakingly real. They 'breathe' and quiver when stroked. Moreover, they seem to employ all the non-verbal means of communication used by real horses: shifts of weight, neighs, whickering and snorts, a turn of the ear or a flicking tail.

This rich expressive detail is essential because while Michael Morpurgo's novel is narrated by a horse, in the stage adaptation, his viewpoint is suggested without words. Farm horse Joey sees the first world war from both sides: he is sold to the British cavalry, pulls a hospital cart and a gun for the German army, works on a French farm and, after being caught on barbed wire in no man's land, is reunited with Albert, the Devon farmer's son who has followed him into the army.

The horse puppets designed by Kohler are of cane, bent into curving shapes that suggest the underlying anatomy, and lined with a translucent skin that highlights the sculptural form. Two puppeteers are visible inside the horse (which is slightly larger than life-size), and a third stands outside to manipulate the head.

Their visibility does not detract from the imagined life of the horse. This is partly because we are used to seeing humans alongside horses, but it is also because unconcealed animation is part of the aesthetic of the whole piece. The audience can see how images are constructed, whether it is farmers holding poles horizontally to represent a fence or a shadow puppeteer adding painfully live, jerky soldiers to a projected image of exploding shells. While the illusion that the horses are moving independently is bewitching, the presence of puppeteers is a reminder that these horses are not animals observed in nature but animals enlisted in human life: in agriculture, warfare and theatre.

The physical characterisation of the horses is based on extensive research and observation, from watching videos of the work of Monty Roberts (the 'horse whisperer') to a visit to a Kent farm run by the Working Horse Trust. Such research, says Basil Jones, 'is about deepening the company's empathy and understanding' of animals. It 'feeds into

the performance in subtle ways', informing the devising of non-verbal scenes such as the aggressive first encounter between two stallions, Joey and Topthorn.

Members of the company – directors, actors, writer and designer – also met soldiers of a mounted artillery regiment, the King's Troop, as they groomed their horses and carried out military manoeuvres on Wormwood Scrubs. One soldier, says Jones, told 'the story of the death of a horse during a public parade and how the other horses were affected by it – not eating for several days'. This story gave substance to a scene in which Joey realises that Topthorn has died: 'Our knowledge of how real horses were affected by the death of their friends – and that horses do have friends – is very important in the way we approach and develop this scene.'

The two-year-long development of *War Horse* allowed puppetry to be developed as a theatrical language throughout the piece, rather than as a one-off special effect. The audience has time to pass from initial wonder through curiosity about technicalities to an understanding of the design and movement vocabulary.

Handspring's animals are neither cuddly, anthropomorphised creatures, nor naturalistic portraits. In *War Horse*, as in other productions by the company such as *The Chimp Project* (2001) and *Tall Horse* (2004), they display the constructed nature of the puppet in order to explore the role animals play in human life.

The power of puppetry to represent things that are 'impossible' to stage – vast landscapes, imaginary worlds, a herd of rhinoceroses or the horrific experiences of war – comes from an audience's ability to see with 'double-vision', perceiving both the material reality of the puppet and the fiction it represents. Since the observation of animals also involves a kind of 'double vision', in which the human viewpoint is always present even as we try to understand that of the animal, there remains much more to explore in the potential of puppets to dramatise both the natural world and human relationships to it.

## Planting an idea on the walls of the National Theatre

In 2007, Heather Ackroyd and Dan Harvey covered part of the National Theatre's concrete exterior with grass. Robert Butler met them before they began work.

You might expect the first line of a play to have an impact on a theatre audience. You might not expect it to have an impact on the building itself. But anyone who sees the National's Lyttelton fly tower covered in grass this summer (and wonders why) should turn to the work of the Swedish playwright August Strindberg.

Two years ago the National Theatre presented Caryl Churchill's version of Strindberg's *A Dream Play*. This surrealist drama, written in 1901, opens with the line, 'Look how the tower has grown.' Before rehearsals, the director Katie Mitchell rang two artists she knew and left a message.

Heather Ackroyd and Dan Harvey are best known for their pioneering use of grass. In 2003, they grew grass inside Dilston Grove, a deconsecrated concrete church in Bermondsey. The whole interior of the building was carpeted in grass seedlings that germinated, flourished and died. Katie Mitchell's message on their answerphone suggested that their next project might be the Lyttelton fly tower. By chance, this was an idea that had occurred to the artists themselves.

When Ackroyd & Harvey started working together in 1990, they used to pass the National Theatre as they crossed Waterloo Bridge on the bus home to Brixton and 'wondered idly' about covering the fly tower. They dismissed the idea because they had never worked on that scale. Seventeen years later, this is exactly what they are going to do. It will be their biggest project to date. They will be doing the north and west sides (north faces the river; west faces Parliament).

It's a big task, and one that has to be done quickly, which is why Ackroyd & Harvey have recruited 22 assistants. Two tons of clay will be carefully mixed on site. The clay needs to have a definite consistency. 'Like cream cheese,' says Harvey. Two teams will apply a thin layer of clay to the concrete surface and then take handfuls of germinated seeds that have been soaked in sacks and push them into the clay.

Within hours nearly two billion seeds will be getting thirsty. Trying to find the right water source has delayed the project. The way round has been to access the 'ground water' that collects in the National's carpark, and pump it from the basement to the fly tower.

It will take the seeds two to three days to reorientate themselves, and then delicate green blades will appear. After a week, the scaffolding and protective netting will be taken down and the grass exposed to the elements. Soon after, Ackroyd & Harvey will stop watering the grass and allow the luxuriant pelt to follow its own course. The cycle of growth and decay will make a striking contrast to the immutable concrete strata of Denys Lasdun's design.



FlyTower. Photo: Ackroyd & Harvey.

Five weeks later, a skip will arrive, the senescent grass will be peeled off, and the concrete underneath will look (as last year's trial showed) a little bit sprucer.

It would be wrong to think of Ackroyd & Harvey as guerrilla gardeners. An art catalogue would place *FlyTower*, very properly, within a framework of pieces that present natural processes in places of architectural interest. *FlyTower* would be seen as a time-based exhibit that combines Ackroyd & Harvey's interest in sculpture, botany and ecology. It would be related to the biochemical research they have done on chlorophyll, underpinning their use of photosynthesis, and to the crystallised whale skeleton that demonstrates their preoccupation with transformation. The art critic, no doubt, would touch on themes of erosion, transience and evanescence.

In 1893, Strindberg was in London during an abnormally hot summer. When he crossed Waterloo Bridge, he suffered a hallucinatory attack. It's unlikely, now, that he will be the only person to cross Waterloo Bridge and imagine that he or she is seeing things. As the first line in *A Dream Play* says, 'the tower has grown'.

## Consuming the city: food, fun and democracy

In April 2007, the London International Festival of Theatre (LIFT) commissioned artists and community groups to create an edible model of London. Sue Palmer joined the public to eat it.

Liquorice gates and Battenberg blocks, gingerbread roads with bright red urban clearway icing lines, a red and white grape Gherkin, the Thames full of sparkling Perrier and the London Eye a pizza wheel with red pepper capsules: this was *EAT London*, a ‘ceremony of urbanphagy’ (eating the city) on a hot and sunny Saturday in Trafalgar Square.

Waffle brickwork and icing cement, towers of cucumber sandwiches (triangular), finely chopped green spring onion lawns, a rich Tate Britain fruit cake covered in white marzipan with blue iced features, an aloo chop Nelson’s Column – all this and so much more laid out on a day that began with a three-dimensional food map of central London assembled together, followed by a musical parade where the 14 individual stalls were wheeled apart and the food served up free to the visitors. We ate London.

Community groups such as Nu-Life, Project Phakama and Roj Women’s Association had each made a section of central London. As the architected food was consumed, a



*EAT London*. Photo: Tim Mitchell.

large-scale black and white map gradually appeared through the crumbs.

There is something fantastic about suddenly recognising an iconic London landmark made out of sponge cake and crafted icing features – you see the artistry and the playfulness of the maker, and architectural grandeur rendered domestic. And there’s the fun of not recognising a place and asking one of the cooks, and the quick working out that a whole field of rice balls and peas is the shape and structure of Hyde Park.

I arrived just as the stalls were serving up, seeing the first knives unceremoniously slice up the gingerbread roads. The gingerbread was passed out to the crowds in light wooden trays – the food appeared strangely resonant and exotic, as if imbued with a sense of democracy; we were finally consuming the city rather than the city consuming us.

Both traditional and contemporary foods were cooked and placed together to reflect the diversity and coherence of London. Colourful, radiant, handmade, generous – every stall was good to look at. There were queues circulating all around the square as people aimed for a slice of the Houses of Parliament, or Selfridges. And the atmosphere was joyous, social and available – participatory in the best sense of the word in relation to theatre.

It’s good to eat City Hall. I began imagining the places I know well made out of food, and eating them. We are surrounded by what we eat. Animals continually graze on their food maps. *EAT London* had this blatant reality and honesty to it. ‘We are what we eat’ took on multiple dimensions.

After the event I wandered down Whitehall, coinciding with the mysterious Changing of the Guard, on to Brian Haw, the peace campaigner, standing in his three square metres on Parliament Square, and then to Tate Britain and Mark Wallinger’s reconstruction of Haw’s original protest against the Iraq war. The new protest exclusion line (one kilometre around the Houses of Parliament) runs straight through Tate Britain and hence through the middle of the reconstructed line of placards and teddy bears.

I was consumed with thoughts of democracy and political protest, citizenship and social engagement. *EAT London* (set in Trafalgar Square, also part of the exclusion zone) was an excellent demonstration of art inviting people to connect – a feast for the eyes, mouth and heart.

## Theatres going a shade greener

The new impetus to green British theatre production and infrastructure was described by Kellie Gutman in a series of reports (2007-8).

**Less power** At the Arcola Theatre in London a new play, *The Living Unknown Soldier*, was powered by a 5kW hydrogen fuel cell installed in their foyer. The National Theatre teamed up with Royal Philips Electronics in a 'green switch' initiative to install exterior and foyer lighting, using highly efficient LEDs to cut the amount of energy needed to light the fly tower by 70 per cent, saving £100,000 a year.

**More recycling** In the West End, the Dominion Theatre received the Mayor's Green Procurement Code 'Extra Mile Award' for their many recycling programmes, including one for batteries (a million batteries a year are thrown away by theatres presenting musicals). The theatre also instituted a paper recycling program and installed recycling containers in the bars as well as can-crushers throughout the building. Over 200 fluorescent light tubes were recycled, and the percentage of recycled products purchased has increased.

**Sharing ideas** The Centre for Excellence in Training for Theatre (CETT) at the Central School of Speech and Drama held a two-day conference: 'Theatre Materials / Material Theatres', including a roundtable discussion on 'Greening the Theatre Industries'.

**Better buildings** In 2006, the Green Light Trust's new building in Suffolk, The Foundry, was awarded a RIBA Sustainability Award for its construction methods. It's as carbon neutral as possible. In 2008, Small World Theatre in Wales built a £1.2 million centre using sustainable methods and materials as part of its 'zero carbon theatre' policy. The centre contains a theatre and a community space with a Resource Centre in Education for Sustainability and Global Citizenship.

**Legislation supporting change** While in office, London Mayor Ken Livingstone developed a 'Climate Change Action Plan for London Theatre'. The Mayor's office partnered with the Arts Council's London office, the Theatres Trust, Ambassador Theatre Group, National Theatre, Alistair McGowan, Independent Theatre Council, Equity, Arcola Theatre, PLASA, and the Association of British Theatre Technicians. In 2008, these groups continued to work with the new Mayor, Boris Johnson, to make theatre a focus of energy conservation, with a goal of a 60 per cent reduction in CO<sub>2</sub> emissions by 2025 (relative to 1990 levels).

## How to reduce theatre's carbon footprint

In 2008, Kellie Gutman rounded up the resources available to help theatres trying to go green.

I'd start by reading *Greening up Our Houses: A Guide to a More Ecologically Sound Theatre* by Larry K. Fried and Theresa J. May (1994), followed by *Easy Eco Auditing* (2008) by Donnachadh McCarthy. With those under my belt, I'd calculate my carbon footprint with tools from Julie's Bicycle, or Mo'Olelo Theatre's *Green Theatre Toolkit*, or the Carbon Me or the Carbon Trust's websites.

A good source of advice is Ian Garrett's online Center for Sustainable Practice in the Arts, which gathers articles and news from around the world and disseminates them to the broadest audience possible. The Centre for Alternative Technology's website offers a host of free practical solutions.

Next, I'd check out the Sustrans website to find route maps on how to cycle or walk to work. If the theatre was in London, I'd go to the Transport for London website to plan my journey and order free London Cycle Guides. I'd encourage all staff, actors and theatregoers to do the same. If no safe route existed, I'd ask them to use public transport instead.

The office would be as paper-free as possible. As much office equipment, metals, plastics and paper as possible would be recycled, as well as batteries. Electrical use would be reduced by replacing incandescent bulbs with compact fluorescents, and stage lighting would be changed to try to use as little wattage as possible. I'd check out the Arcola Energy Blog for help with lighting.

Should space and orientation permit it, solar panels would be installed for electricity and hot water. If in London, I'd consult the Mayor of London's solar initiative website, Solar for London. I would also look at the Urban Wind Energy website to see if wind energy was viable for my setting. Tap water, not bottled water, would be available for drinking, and all staff would have their own reusable glasses, mugs or drinking bottles.

Sustainable materials would be sourced for sets; they'd be reused as much as possible, or donated to other theatre groups. Costumes would be recycled into future productions or made from recycled materials.

In the wardrobe department, washing lines would replace the clothes dryer as often as possible. Dressing room showers would have low-flow showerheads. All toilets would have ultra-low water flow. I'd go to the Green Consumer Guide website to learn about environmentally friendly cleaning supplies and paints, office supplies and other green office issues.

And to cap it off, I'd hire writers to write new works about green issues, which would be produced and staged in this greenest of theatres.

## To dine is a kind of performance

Theatre critic Bonnie Marranca founded *PAJ: A Journal of Performance and Art* and is the author of *Ecologies of Theater* (1996). Wallace Heim listened to Marranca's 2009 lecture on the connections between theatre criticism and food, drawing on the themes of her book *A Slice of Life* (2003).

Bonnie Marranca began her lecture, 'The Theatre of Food', with an evocation of the food of her Italian-American childhood in New York: peppers and eggs, tomatoes, spaghetti and stews, donuts, hamburgers, pies, root beer and chocolate peanut butter cups.

Describing food in film, visual arts and performance over the twentieth century, Marranca talked of the centrality of food in culture and everyday life, and of how food describes the mentality of an age and its geographies of taste:

What is a dinner plate but a field of narrative that tosses back all kinds of images between servings, especially one's own. [...] For better or worse, the dinner table is the centre of the world, the family meal the source of the drama of the self.

Food, according to Marranca, played an important part in the modernist movement, starting with the banquet thrown by Picasso in 1907 for Henri Rousseau, with Gertrude Stein and Alice B. Toklas. In the 1920s, audiences for Dadaist provocations revived the custom of throwing vegetables at performers. The Italian Futurist F. T. Marinetti published a manifesto on cookery in 1932, *The Futurist Cookbook*, denouncing pasta as nostalgic, preferring a radical use of colour, shape, music and lighting without regard to taste and nutrition.

Marranca described the continuing relationship of the avant-garde with food through Alan Kaprow's Yam Festival in the 1960s, and the inclusion of food in many of his happenings. Judy Chicago's installation *The Dinner Party* (1974-79) has become an icon of feminist art, associating the ceremonial banquet with a celebration of women. The associations with feminist art continue in the work of Kathy Acker, Lucinda Childs and Carolee Schneeman.

In the 1980s, ecological performance artist Rachel Rosenthal used cauliflowers in *Rachel's Brain*, a production about the human in evolution. Suzanne Lacy initiated dinner as a performance event, holding a series of dinner performances. Continuing in this mode, Rirkrit Tiravanija invites people into a gallery space where he makes and serves a Thai meal.

On stage, the customs of eating have provided a commentary on theatre itself, as well as on human life. Bertolt Brecht made the connection between theatre and eating when he disparaged the conventional stage as a 'culinary theatre', meaning that the consumption of stale ideas during a performance was a form of 'bourgeois gluttony'. The British 'kitchen-sink' realist dramas of the late 1950s showed that all was not well in society. The kitchen and familial meals featured particularly in Arnold Wesker's plays. *Chicken Soup with Barley* shows a family's conflicts and fragmentation over socialist ideologies, as the protagonist Sarah provides abundant domestic meals. In *The Kitchen*, set in the basement of a large restaurant, the chefs, porters and waiters struggle with love, food, politics and money in the course of a day's work.

To dine is a kind of performance, where, from our place 'setting,' we exchange stories, debate ideas, and reveal our dreams, the unspoken settling temporarily in the silence between adverbs. Not surprisingly, many of the influential plays in the world repertoire take place in the kitchen or dining room. Here huge psychological dramas are served forth and characters devour one another or set themselves free in forked sentences ... [E]veryone, at one time or another, has experienced the difficulty of swallowing angry words. The dinner table is one of the great settings of heartbreak.

In her lecture, Marranca touched on wider issues of food and global food production, fast food, the Slow Food movement, and the disparity between American and European responses to genetically modified foods, pointing out that a 'bowl of fruit is no longer a still life, it has within it the ethics of production.' But the centre of Marranca's talk was the cultural meaning of eating together:

The experience at table offers one of the few realms of privacy and intimacy in a culture of increasingly vulgarised public obsessions. It honours speech, direct communication – the face-to-face, not interface.

Quotations are from the preface to *A Slice of Life: Contemporary Writers on Food*, ed. Bonnie Marranca (2003).



## Old tales, fresh takes (2): The narwhal

In her retelling of an old tale, Helen East turns to the myths of the Inuit people. In a subsistence way of life, every creature that can be eaten, including the whale, is essential food. But hunters need the hunted to survive as a species – and so restrict the time and means of hunting. Killing is permitted only out of need, not greed.

In the bare bones of winter only the strongest survive.  
In the worst winter of way back time, not many were left alive.  
Those who could, moved on, to see what food they could find.  
The weak ones tried to follow, but some were left behind:  
An old woman, her granddaughter and little brother Tutigat, who was blind.

The grandmother tried to lose Tutigat, but his sister wouldn't let him go.  
When a bear attacked them, his sister helped him aim the bow.  
His arm was strong, and he killed the beast, but grandmother told him he had missed,  
and secretly cut and cooked the meat when she thought that he had gone to sleep.  
He knew that she was lying; he heard the water boiling; he smelt the bear meat cooking.  
He heard the grandmother whisper to his sister 'come out and eat'.

*Tutigat's sister saves him from starving but is forced to abandon him by a lake. A goose helps him by dunking him under water, and miraculously, he gains his sight. Now, as he rejoins his grandmother and sister, the roles are reversed.*

'Let's see what we can catch!' said the boy. This time he led the way.  
Winter had eased and it was the white whales season. They came to a sea break where several were swimming offshore. Taking up his harpoon, Tutigat tied the end of the line around his sister, so she could act as 'anchor'.  
'You have always shared with me,' he said. 'Now you can be my whale's tail.'  
The girl was delighted because this meant that she was partner in the hunt, with equal shares in the catch. She settled herself firmly on the shore-ice, and soon her brother had harpooned a small whale which they easily hauled inland.  
Now there was food, but the grandmother said, 'One more! One more! And let me be the whale-tail now!' for she wanted to be sure of her share, too.  
This time there was a bigger whale – a beluga – but it was further out.  
'Hurry! Hurry!' said the grandmother. 'Tie me! Tie me!'  
Then Tutigat took aim, and threw the harpoon.  
The whale was wounded, and it pulled on the line. The old woman began to slip. She

tried to grab hold of the girl, but at that moment the line jerked hard. Grandmother skidded, slid across the ice and shot into the water.

The sea sucked her in, spinning her round and round, and then spewing her out. As she surfaced with a gasp like a whale's spout, they saw her hair had whirled into a long white twist like a tusk. Her skin was dark and leathery with cold. Her shape was smoothing out – streamlining.

Then the whale dived down and down she went. Deep, deep, deep. Down she went for ever.

That's how it happened, that's how she changed. She became the black narwhal, with the white tusk that glints when it catches the sun.

That's how it happened, way back then.

A version of this folktale, collated from sources in Labrador and Greenland, appears in Henry Rink's *Tales and Traditions of the Eskimo, with a sketch of their Habits, Religion, Language and other Peculiarities*, published in London in 1875. Another version is in Howard Norman's *Northern Tales*, from a translation by Severance Rosegood of a story told by Pioopiula in 1975.



Pencil drawing: Nancy Nichols.

## Beauty and the wind turbine – inside and outside the gallery

In 2010, a photography exhibition prompted Wallace Heim to consider how conventional assumptions about beauty shape our attitudes towards wind turbines.

The *Guardian's* online exhibition of photographs of wind turbines, *The Beauty of Wind Power*, purports to show the aesthetic value of turbines in their beauty and awe-inspiring visual qualities. To back this up with use-value, the paper gives the numbers of households provided with wind-generated electricity, ranging from 80,000 at Burbo Bank at the mouth of the Mersey to 145,000 in Manawatu, Tararua in New Zealand.

The photographs show striking silhouettes, the sensuous and almost animate curves of the blades and landscapes that seem to fold around the pristine and elegant machinery. The photographs are well composed, like picture postcards, and it's this conventional representation that makes me wonder whether the wind turbines are beautiful, or whether it is more the case that it is the photographs as images that are most pleasing.

Conventional assumptions about beauty seem to operate on both sides of the wind farm debates. To generalise, when the opponents of wind farms extol the beauty of a landscape which will be destroyed by ugly or intrusive turbines, the counter-argument is often that those views of a landscape are historically contingent or do not take into account the industrialised character of the British landscape. That very sense of what is beautiful is reacted to as being simplistic, unchanging, too readily accepting of the bucolic as 'right', and needing to be preserved.

Images like the *Guardian's* photographs are open to a similar criticism. They are too easily seen as pleasing if not beautiful. Their aesthetic, as well, reflects views of composition, lighting and the relation of viewer to landscape which can be critiqued as historically contingent, over-simplified, so familiar from popular media that it appears as a 'normal' or an unquestioned image of beauty. This may be a strategy in trying to persuade the public of the aesthetic value of turbines, but it doesn't go far enough into questioning what is or can be seen as the beauty of these machines.

Rather than settling on pleasing images or familiar vistas as justifications for or against wind farms, it can be the unsettling disjunction between the conventionally beautiful representation and the landscape as experienced that may open up debate about what is beautiful, what causes beauty and what is intolerable. The inclusion of wind turbines on land and seascapes could be changing what is considered beautiful or awe-inspiring, in ways that aren't yet articulated, and in ways that the previous notions of beauty can't configure.

Another way to make an argument that wind power has aesthetic value is to take it into the gallery, and let that space do its work of turning industry into art. Alec Finlay's installation *sky-wheels*, at the Hatton Gallery, Newcastle, was part of the AV10 Festival.

On the walls are the words: 'all art is, is rhythm'; 'every form heals'. Sixteen small, wooden turbines painted in variations of blue sit on a blue plinth. The blades don't turn, but on each is printed words, metaphorically conveying the motion of wind: 'turning – toward – living'; 'turn – still – sails'; 'what – changes – change'. It is as if the turbines camouflaged by the blue can express a deeper poetic to their function.

A series of recordings of whooshes, swishes, motor hums, and sharper, cricket-like metallic sounds is at first soothing and intriguing. But it begins to feel quickly as if the rich irregularities of waves or winds had been stripped down to a too-regular noise. The manipulation into a sound work makes the sound too small, too easy to dissect. Although it was working with a different aesthetic to the photographs, it also was not doing the work of turning these structures into appreciable art. Something of the scale, the awe, the experience was missing. The installation is an appreciation of wind power, but possibly too literal for some.

Driving back from Newcastle, I stopped at the turbines of the Lambrigg Wind Farm, by Junction 37 on the M6, the crossroads with the road between Sedbergh and Kendal. The five monumental structures sit on high ground between the Howgills, and the undulating slopes down to the River Kent valley and the high fells to the west. It's a favourite picnic spot for locals during the day, and a place for lovers in the evenings. The light was fading, and the wind was low, westerly, giving the blades a gentle, breath-like cadence. The presence of those structures and their enveloping sound kept a half dozen people there, just being there, until the sun set.



Lambrigg Wind Farm, Cumbria. Photo: Wallace Heim.

## Wake Up Everyone: a play about oil and climate in Nigeria

Nigerian playwright Greg Mbjajorgu was commissioned to write *Wake Up Everyone* by the African Technology Policy Studies Network in 2009. Three years later, Greg sent the Directory a copy after reading Robert Butler's blogs about the difficulties of writing plays about climate change. Wallace Heim found truth and turbulence in the central character.

In *Wake Up Everyone*, the policy world is represented in the main character, Maukwe Aladinma, a retired professor of agriculture, now attempting to get the local government in the rural Ndoli area to build flood defences and advising communal farmers on using organic waste and planting stronger, non-GMO seeds. The professor is also a dramatist. In a play-within-a-play, the actors of his theatre company rehearse scenes describing the effects of climate change, those happening now and those anticipated: rivers dried, torrential floods, tornadoes, plagues, famines and poverty. The surrounding scenes are naturalistic; the rehearsals are to be performed as if in a dream or possessed.

A local official, Edwin Ochonkeya, blocks the building of the defences. When floods sweep the land, the farmers become an angry mob, running off stage to exact revenge on him.

The play has a purpose: to support impoverished farmers, to educate, to build resilience against the effects of climate change in rural Nigeria. The information on climate change is familiar, if uncomfortable. The role of the expert in presenting knowledge to farmers is familiar, too, the belief and disbelief, the sometimes awkward juncture of different kinds of experience, the social power implicit in different kinds of knowledge.

The depiction of the official, Ochonkeya, is what startles. His actions are presented as commonplace. A militant against the oil companies, he was on the verge of forming his own kidnapping gang when a massive oil spill damaged his family's land and killed his father. He employed a lawyer to bring an action against the companies. They settled out of court and funded his campaign for local office on condition that he didn't make any further case on behalf of affected farmers. He won his campaign with the rhetoric of environmentalism: 'Before this plague of climate change the oil companies had milked our land dry, but have given nothing to nourish it. All that is left (of my family's farmland) is thick layers of oil, oil in our waters, oil in our wet lands, oil in our fragile soil, down to the roots of our edible crops, oil and more oil...'

And now, he is stopping any adaptation to or mediation of climate damage. In a single character, the play conveys the immediate, turbulent, deceptive forces underlying oil production in Nigeria and in Canada, Baku-Tbilisi, Iraq and the Arctic.

*Wake Up Everyone* was awarded first place in the Individual Award in Arts and Humanities Research at the Nigerian Universities Research and Development Fair, 2012.



Oil spill at Goi Creek, Nigeria, August 2010. Photo: Friends of the Earth, Netherlands.

# JOURNALS

## Walking into my fears

Playwright Samantha Ellis wrote a journal for the Ashden Directory as she researched *The Last Wolf in Scotland*, her play about 'rewilding' and the proposed reintroduction of wolves to the Scottish Highlands.

9 March 2006

I get on the Tube today with a book, Barry Lopez's *Of Wolves and Men* (1978). A wolf stares out from the cover, its yellow-green eyes wild and strange.

I'm reading the book because of a website I chanced upon when researching Leviathan for a play about Noah's Ark. My research on the Biblical monster led me onto other monsters and then to a website on which Aboriginal women were campaigning against conservationists. The conservationists wanted to reintroduce the crocodile to a nearby river. The women didn't want the crocs back. They'd been glad when the last one was killed off. Now they feared for their children.

It was the first time I'd encountered the concept of faunal rewilding. It seemed such a perverse idea – a forced return to a harsh and terrifying past. I couldn't fathom why anyone would want to do it and because I hate not knowing why people do things, I started doing some research.

Wolves terrify me. But Lopez is irresistible. His thesis is that we create our animals, just as we create our gods. We know little about the wolf, but much about how we imagine the wolf to be. He loves wolves because they are elusive. So elusive that he says he can look in the direction of a grey wolf 'standing in the snow in winter twilight and not see him at all.'

I can see that there is a poetry to this, that there is an argument for a sense of relationship with predators that I certainly have lost in my urban, disconnected life, and that what the conservationists called 'charismatic megafauna' have a kind of savage splendour.

I begin to see why conservationists might be fascinated enough by wolves to want to bring them back to live among us. Which means I might have a play.

27 June 2006

I'm starting to wonder how much of my fear of the wolf is justified. I'd always assumed it must be based on facts, but I'm finding that wolves rarely attack people, don't howl at the moon, aren't driven mad by the smell of blood and are only about the size of a German shepherd. Yet the fear of wolves seems to be both primal and universal.

Last night, I watched Angela Carter's *The Company of Wolves*. It's a schlocky, dated horror film, but a classic, driven by Carter's haunting formulation that the really bad wolves are not the ones that howl in the night but the ones who are 'hairy on the inside'.



European wolf (*Canis lupus*) in birch forest, Norway. Photo: Mark Hamblin.

I went to bed. A moonbeam fell across the pillows. I dreamed a wolf burst through my window.

9 September 2006

I'm in the Cotswolds for 'Scary or What?', a one-day conference on reintroduction organised by the Wildland Network. There are 80 conservationists here who don't want to just preserve what's here but to radically remap our landscapes and reconnect us with the wild.

I'm surprised by how much talk there is of fear and death. In a landscape with predators, we would have to give up our Beatrix Potter view of nature and remind ourselves that the wild is full of killing. Maybe we need this, not just because it would be more realistic but also because fear is the flipside of survival. It can be exhilarating. It can make us feel more alive.

I want to feel a bit of exhilaration myself so instead of going on the field trip I'd signed up for (to look at beavers in an enclosure), I venture into the Forest of Dean to try to get

a glimpse of the wild boar which were reintroduced by mistake when they escaped from wild boar farms. Trying hard not to think about tusks, I follow the others into the forest at dusk. It is dark and mossy, bats are emerging, and we're looking for 'field signs' (that's conservationists' code for scat and hair and scratches). I pull some hairs out of a tree trunk. They are long and brown and coarse.

I feel about a million miles from my desk in London.

#### *16 September 2006*

I'm on a moor on the east coast of the Highlands, looking at the Hill o' Many Stanes. Over a hundred standing stones peek from the gorse and heather. They're not solemn or majestic-looking, but squat and higgledy-piggledy. Archaeologists suspect they may have been a Neolithic lunar observatory. The cold sweeping mists certainly feel Neolithic.

It isn't hard to find anti-conservation views in the Highlands. History has muddied the issue of what to do with the land. Where conservationists see wilderness, many Highlanders see depopulation. The message is clear: the wolf doesn't have a lot of friends in the Highlands.

Neither, of course, do the conservationists. A battle is raging about how to use and manage the land. I feel as though I'm drowning in opinion. I want to get everyone in the play – walkers, stalkers, golfers, poachers, crofters, conservationists, shepherds – all depicted by five actors with a lot of hats and stick-on facial hair.

#### *19 September 2006*

Alladale is nicknamed 'the Jurassic Park estate' because of owner Paul Lister's plans to create a fenced-off wilderness reserve in the middle of the Highlands in which various native species will be released, from the red squirrel right up to the brown bear.

I set off with the head keeper and stalker, Innes MacNeill, for the wilder reaches of the 23,000-acre estate. It's stunning. There are gnarled and twisted ancient Caledonian pines, a sparkling salmon river, scarlet-berried rowans and Highland cows.

The estate is already home to a posse of wild boar which have had to be fenced off because they were causing damage to the tree roots. As I edge gingerly away from the boars, MacNeill asks, 'Why are you writing this play?' I give the response I always give, which is that I write about what I fear and what I desire, that writing's a way of walking into my fears.

He flicks a switch, and says, 'Go on then. Step over the electric fence.'

So I have to.

#### *20 September 2006*

The Highland Wildlife Park at Kincaig is run by conservationists who want to give people

an authentic experience of the wild. It's home to a pack of wolves. We arrive mid-afternoon and go straight to the enclosure. Two wolves trot through the grass, giving us a sidelong look. It feels wrong to be looking at them in brilliant sunshine. For all the research, all the myth-shattering, I still imagine coming upon a wolf at night, a full moon shining on the snow, flakes glittering on its fur.

One of the wolves trots back through the enclosure. He has a slinky way of moving and a cunning look. He slows down to a lope. And then he stops. And stares. I stare back.

The mesh of the enclosure separates us. I'm in a car. He isn't even very big. But still I feel a chill down my spine. He holds the stare for a moment before moving on.

#### *24 October 2006*

I'm in Surrey, working with a group of eight- to ten-year-olds to make a play in a week. They like improvising stories set in outer space, but the real surprise is asking them to make the sounds of a forest.

They start with owls hooting, wind rustling through trees, leaves crunching underfoot, and then one boy starts making ghost noises while another howls like a wolf. They seem to have a sense that wolves are necessary to forests, but also that wolves occupy the same imaginative space as ghosts. Does this mean that we should leave wolves in our imaginations? Or does it mean that we imagine wolves because we need them, and therefore should bring them back?

#### *2 November 2006*

I've finished my first draft.

#### *3 November 2006*

I'm ripping my play apart. When I read it, I'm just bewildered. I do at least know what I am writing about: life and death, love and survival. It's a relief since for a while I thought I was writing a play about Scottish land reform.

The prey and predator relationship is what really fascinates me. Is human life separate or are we part of the food chain? Is life sacred or are we just meat?

I've started to write a character who wants to shed the protection of civilisation and society (like Lear crying 'Off, off, you lendings' as he tears off his clothes in the storm) and face raw nature, red in tooth and claw, to pit himself against the elements.

For this character, losing our fear of predators has been a bit like losing one's faith. The wolf is not just an animal but a psychological function; just as God reminds us we are not on top of creation, so a wolf reminds us we are not top predator. We can and should still feel fear.

*18 December 2006*

Last night I finished a draft of the play that I am happier with. With some regret, I've got rid of a Hebridean Druid, a pair of fishermen, two ramblers, a City stockbroker, an octogenarian poacher, a Canadian retracing his Highlands roots, a historian and a squirrel expert.

However, I've had fun writing some ghosts. Eagan Macqueen, who killed the last wolf in Scotland in 1743, pops up to settle a pub argument while the Brahan Seer prophesies the end of sheep farming. (He made his prophecy in the seventeenth century and sheep farming isn't over yet.)

*31 January 2007*

I'm barely awake when a friend texts me to say I should read a new study by scientists at Imperial College London. It suggests that the wolf needs to be reintroduced, that wolves could rejuvenate the Highlands by predateding on deer and thus reducing the pressure on forests and woodland. I'm excited to see the issue has finally hit the headlines. By the time I get to *The Scotsman's* website, over 60 people have left comments on the story.

I can't help joining in and then, when I log in again, I find that someone has responded by declaring love and asking me to be his vixen.

*2 April 2007*

Tonight I'm celebrating the Jewish festival of Pesach (Passover) with my family. The Pesach narrative doesn't have much to say about the wilderness where the Jews spent 40 years in between leaving Egypt and finding Israel. The wilderness does feel like a rite of passage. There's a sense that you have to journey through unknown places, even to get lost, before you reach the promised land. I wonder just how wild the wilderness was, and if they encountered any wolves. There are, pleasingly, still wolves all over the Middle East, and at least 400 in Israel alone.

*24 July 2007*

Shakespeare refers to wolves 50 times in his plays. He uses the wolf as shorthand for cruelty, giving King Lear's daughter Goneril a 'wolvish visage' because she is ruthless enough to send her father out into a night so harsh that 'If wolves had at thy gate howl'd that dern time,/ Thou shouldst have said, "Good porter, turn the key..."'

In *The Merchant of Venice*, it is Shylock who is excluded from polite society because his 'desires/Are wolvish, bloody, starved and ravenous'. Here, the wolf is synonymous with greed.

In *Othello*, the wolf acquires a reputation for lustfulness, with Iago suggesting that Desdemona and Cassio are as 'salt' (lecherous) 'as wolves in pride' (on heat).

*14 February 2008*

I'm writing this a couple of days into a two-month artist's residency at the MacDowell Colony in snowy New Hampshire – all silvery birches and sticky, feathery pines.

It's deep midwinter. Last night we had a snowstorm, then an ice storm and what the Americans called a 'power outage'. We lit Victorian oil lamps to have dinner by and huddled round the hearth until the power came back on. Late at night, back in my studio, I curled up in bed to read *King Lear* and shivered as I heard what was unmistakably howling. I woke to find tracks circling my studio. Apparently, though, they are more likely to be coyotes rather than wolves.

*2 April 2008*

It's strange to think that I've been living in the shadow of one of the key sites in American eco-criticism. The artists' colony is shadowed by Mount Monadnock, one of Henry David Thoreau's favourite climbs. Its name comes from an Abenaki word for 'mountain'. Talk to anybody here – the artists, the maintenance team, anyone – and Native American lore and language comes up sooner rather than later.

In Britain, we do have a long way to go in making our countryside feel accessible to those not born there. Go for a walk somewhere wild in Britain and you rarely hear an accent that isn't English. The British landscape sometimes feels closed to those who aren't connected to it by history or blood.

The historian Patrick Wright has even speculated that 'the English landscape might be a racist construct.' Certainly, the defensiveness towards American grey squirrels, Alaskan sitka spruces, Japanese sika deer, anything that isn't thatched does veer towards xenophobia. Our eco-literature, too, rarely comes from anyone who doesn't have an historical connection to the place they are writing about. But I'm hoping that will change, and is changing.

*25 May 2008*

The beavers are coming back! The beaver has always been the front line of reintroductions in Scotland. Several conservationists have made the point to me that there is no hope for reintroducing wolves or bears when even beavers aren't being let back in.

But now this is changing. The Scottish environment minister Michael Russell has said 'Yes' to a trial reintroduction of 16-20 beavers to Argyll. The beavers will be the first in Scotland in 400 years.

Talking to the *Sunday Herald*, Russell cast the plan in oddly moral language: 'Beavers were an original victim of wildlife crime when they were exterminated and it's time to rectify that.'

*How to be a Heroine by Samantha Ellis was published in 2014.*

## Other lives brought home

Playwright Satinder Kaur Chohan journeyed to the Punjab to research *Zameen*, her play about land and families caught in the global economies of cotton, seeds and debt.

In 2007, I travelled to north-west India to research my play *Zameen* (Land). Set in the cotton fields of Punjab, *Zameen* seeks to weave a twenty-first-century tale of globalisation around the village lives of a small, cotton-farming family. I had seen a request for short plays by Kali Theatre, a company specializing in writing by Asian women. Instantly, I knew I wanted to write a play set in the land of my ancestors.

My family had been farmers in Punjab. My father migrated to Britain in 1968 and my mother followed five years later, with my brother and sister. I am the only British-born member of the immediate family, growing up in Southall, west London – a town familiarly known as ‘Chhota Punjab’ (‘Little Punjab’).

For many months, I sat at my desk writing *Zameen* using only newspaper reports, books and my parents’ shaky memories of agricultural life in Punjab. My core characters slowly emerged: Baba, the ageing and hard-working cotton farmer; Chandni, the dutiful daughter, who dreams of escaping her prescribed womanly fate; and Dhani, the alcoholic and drug-addicted son, who dreams of escape to ‘Amrika’. As the play developed, I added two characters, both of whom embodied a global dimension: Lal, a village moneylender who doubles as a local commission agent (seller of corporate seeds and pesticides); and Suraj, his son and Chandni’s childhood sweetheart, who returns from a brief period away as an illegal immigrant in ‘Amrika’.

### The first trip

I arrived in Barnala, Punjab, in May at the beginning of the cotton-sowing season. I travelled across the cotton belt, visiting villages in the southern districts of Sangrur, Moga and Bathinda. Ostensibly, this is the old Punjab of close-knit families and village communities, wholesome food from the fields cooked over a chula stove, sleeping out on a charpoy under the stars, drinking endless cups of chai, gossip, laughter, but the reality is very different.

Before leaving for Punjab, I had contacted the Movement Against State Repression in Chandigarh, a non-profit organisation partly involved in gathering information about farmer suicides in Sangrur and providing support to the families. In Bathinda, I contacted the Punjabi Bharat Kisan Union (Punjabi Farmer’s Union). I also contacted Umendra Dutt, executive director of the ecological NGO Kheti Virasat Mission, which promotes sustainable agriculture and natural farming throughout Punjab.

These vital contacts gave me invaluable advice, informed perspectives and trusted contacts within the villages themselves. I stayed with cotton-farming families, immersed myself in the rhythms and routines of village life and interviewed cotton farmers, suicide widows, young village men and women, even moneylenders.

I met many families across the cotton belt who told how, burdened by debt and the loss of land, their loved ones had killed themselves, many swallowing industrial pesticides, or had fallen into chemical addictions.

Gurdial Singh, who is over 70, has lost three sons. ‘Two jumped in front of trains and a third electrocuted himself. Our house was ruined. The debt became more than the value of the land.’ A suicide widow in her thirties in Sangrur wept as she remembered, ‘One day he just said to me: “The debt has become too much. It’s gone to my head. I can’t live. Only when I die, will I get rid of the debt.” He swallowed a pill but he died because of the debt. There were seven of us to feed and he couldn’t earn a lot of money.’

In a state that boasts a strong matriarchal tradition, Punjab has the worst child sex ratio in India due to its high rate of female foeticide. A suicide widow Taran Kaur, 25, told me, ‘When I got married at 15, I didn’t have a dowry. Nowadays, the girl’s family have to buy televisions, coolers, washing machines, motorcycles, cars, even hand over cash or land, depending on what the boy’s family demands.’ As India embraces western-style consumerism, even village dowries must include expensive products, leading some villagers to think it easier to do away with a daughter’s later financial burden prior to birth.

### Transcribing the interviews

In late June 2007, I returned to Britain with hundreds of photographs and 60 taped interviews, which I transcribed with the help of my father and sister-in-law. Sometimes, they were in tears. Other times, they wondered if it was necessary to be so meticulous. I felt I needed to work carefully through all the interviews as I might find a word, anecdote, emotion or feeling that would tell the story better or infuse more power into the play. I tried to listen to the Punjabi closely, translating words or phrases that sang with images or metaphors.

Rural Punjabi certainly retains a colour and vibrancy that a colloquial ‘British-Punjabi’ is rapidly losing. *Zameen* is conceived in Punjabi but it is written like a play in English translation. Treating it as such, the actors would later perform the play in their own British accents.

As I continued to transcribe the interviews through the summer, I began to wonder about the impending harvest. So, after delving into some savings, I returned to the family with whom I stayed in Bathinda to see the cotton in bloom, and bring the cotton cycle to a close.





Image from the poster for the 2008 Kali Theatre production of *Zameen*.  
Photo: Satinder Kaur Chohan.

### *The second trip*

If the first trip to Punjab had been very work-structured, the second was more meandering – soaking up the joy, pain and nuances of village life.

In the village of Bhuccho Khurd, I joined in the convoy of tractors, trundling down the long, dusty road into the cotton fields.

From afar, the cotton looked like a light dusting of snow. Close up, a jungle of spiky cotton sticks scratched as we plucked cotton balls from the pods. Many stalks were covered in mealy bug – the latest pest of many to ravage Bt cotton in the fields. There were tobacco caterpillars and other pests, crawling over the plants and sometimes, my clothes.

I could not pick as quickly as the others, nor last as long, often sneaking away to stretch out under the kikar tree or lie on a charpoy when the heat or work became too much. The women had no such choice – they worked from morning to sundown, cotton sacks swelling on their backs, laughing and gossiping to get through the sweltering day.

On the first Punjab trip, I tried to learn more about Punjabi drama, visiting venues such as Punjab Naatshala in Amritsar, meeting legendary writers such as Gursharan Singh and inspiring directors like Kewal Dhaliwal of Manch-Rangmanch and Zulfiqar Khan of Theatre Age, an extraordinary, small theatre group based in Chandigarh that educates slum children in the afternoon and trains them as performers in the evening.

I returned to Britain determined that *Zameen* should exude the spirit of a specific form of Punjabi theatre. If the play draws inspiration from Lorca's heightened depiction of Spanish rural peasantry or Ibsen's concern with contemporary social issues, it also draws upon the entwined folkloristic elements and consciousness-raising politics of Punjabi street theatre, often deployed in villages and cities as an instrument of social change.

Between April and June 2008, *Zameen* played on a national tour, and was met with diverse and enthusiastic audiences, including first-time Asian theatre-goers and non-English speaking Asians. *Zameen* is a play about small lives and global concerns. As 'First World' global consumers, we should know more about the lives of 'Third World' rural producers – and the high cost of human suffering and environmental degradation they pay to put the cotton clothes on our slightly more affluent backs. *Zameen* seeks to offer a glimpse into their world.

## A feast for a thousand

From 2006 to 2011, a team of artists led by Clare Patey transformed a London bridge for one day each year in order to serve up a spectacular harvest supper. *Feast on the Bridge* encouraged people to reclaim a public space, share a meal, have a dance and a conversation. Here, Clare Patey talks through the 2009 feast. Photographs by Tim Mitchell.

### Getting ready

On Friday afternoon we loaded up everything in Peckham and drove to Southwark Bridge. The road was closed at 10pm, and then we set everything up. We worked all through the night, building little sets to be dressed. There were about 100 tables. We were laying the table for 1,000 people.

Each of the place settings on the tablecloths has an illustrated food story printed onto it, collected from Londoners in the months leading up to the event. The *Feast on the Bridge* is part of the Thames Festival. Last year they said 35,000 people came.

### Gardens on the move

A number of shopping trolleys taken out of London canals were given to us by British Waterways. We worked with three primary schools, a seniors' group, a visually impaired group, the Guerilla Gardeners, the Coin Street Community and others, to grow mobile edible gardens. They also grew mobile gardens in potato crates, barrels, shopping baskets, recycled boxes, in a skip and in a boat – everything had been used before. We were trying to bring a sense of harvest to the bridge.



### Mayo alchemists

People were invited to come to an mayonnaise-making ritual around an egg-shaped table at high tide and low tide, and there was a more communal free-for-all during the afternoon.

All the eggs were laid by the chickens that were on the bridge that day. Some of the eggs were actually laid on the bridge. There's something quite alchemical about mayonnaise – because there are only two ingredients.

### Eating your hat

This is an edible hat. The idea was to make mobile edible hats that people would put on and then they would go round the tables with a pair of scissors and they would chop off bits of the hats into people's dinner. There were army helmets, top hats, wedding hats and a fez. The hats had nasturtiums, chives, basil, mint, lettuce, and tomatoes. There was watercress growing on the brims.



### Hay fights

Storyteller John Rowe told stories every hour. All the kids sat round on hay bales. When he had finished telling stories, there was a massive hay fight. I'd say about 100 people were throwing hay at each other for four hours. All these adults playing like kids, and kids playing like kids, they were all doing the same thing. There was something very carefree about seeing an urban population doing such a simple thing.





### *The beast cake*

The Beast on the Bridge was a mythical beast of the river. Konditor & Cook made the cake. It was six metres long. Visitors to the bridge were invited to come along and decorate it. Mini-cakes formed the River Thames; people decorated them with 'watery' colours. It was a

huge thing to move. Twenty people pushed this trolley into the centre of the bridge and then we served the cake, and gave away free tea.

### *Pumpkin lanterns*

Visitors to the bridge carved about 100 pumpkins. There were all sorts. People generally do faces: devils, scary ones, mythical ones. One of the pumpkins was being sick, with lots of pulp coming out of its mouth. Pumpkin has got a lot going for it: it's traditional, it's autumnal, you can cut out the faces, you can use the pulp for soup, you can give away the seeds so that people grow pumpkins for next year, and it's a lantern. We put lights in them and took a barrow down the centre of the bridge and handed out the pumpkins, so they lit the tables as evening drew in.



### *A balmy evening*

At night we had a band, the Bikini Beach Band. *NME* describes them as the 'kings of surf noir'. Three guys in the audience were dressed as Elvis. They sat around all day waiting for the music and then they started dancing. There's an incredible view over the River Thames. It's dominated by St Paul's, which looks really beautiful at night, and the other way, there's Tower Bridge, and you are in this space that's usually got cars on it, so it's quite magical at night. It was a balmy evening at the end of one of those Indian summer days. It was probably the nicest day for weeks. We were very lucky.

# **TIMELINE & ASHDENIZEN**

The Ashden Directory timeline relates environmental and political events to developments in art and theatre, beginning with Ibsen's intertwining of social and environmental themes in his 1882 play, *An Enemy of the People*.

The Ashdenizen blog – notes on culture and climate change – began in February 2008. For the first three years it was mainly written by Robert Butler (RB). From June 2010 the blog included guest contributions from Wallace Heim (WH), Kellie Gutman (KG), Bradon Smith, Kellie Payne, Benjamin Morris, Abbie Garrington, Monik Gupta and Su Grierson.

1800

1850

1882

**1882** Premiere of Henrik Ibsen's play, *An Enemy of the People*.

**1884** Premiere of Henrik Ibsen's play, *The Wild Duck*.

1899

**1899** Premiere of Anton Chekhov's play, *Uncle Vanya*.

1949

1945

**1945** As the first atomic bomb explodes at Trinity Site in New Mexico, nuclear scientist J. Robert Oppenheimer quotes from the *Bhagavad-Gita*, 'I have become Death, Shatterer of Worlds'.

**1949** Publication of *A Sand County Almanac* by Aldo Leopold which defines conservation and wildlife management, and initiates a genre of nature writing.

1961

1970

1962

1967

**1961** Launch of the World Wide Fund for Nature (WWF).

**1962** Publication of *Silent Spring* by Rachel Carson, describing the impact of pesticides on the ecosystem through the food chain. The book led to a change in US pesticide policy and is credited with inspiring the environmental movement.

**1964** *The Royal Hunt of the Sun*, a play by Peter Shaffer about the Spanish invasion of Peru and the destruction of the Inca empire, is produced at the National Theatre, London.

**1967** Publication of *The Historical Roots of Our Ecological Crisis* by Lynn White Jr.

**1969** Friends of the Earth is founded by David Brower.

**1970** Earth Day is celebrated for the first time.

- *Time* magazine puts biologist Barry Commoner on its cover, calling him the 'Paul Revere of ecology'.
- Teddy Goldsmith founds *The Ecologist*.
- *The Environmental Revolution* by Max Nicholson is published.

1971

**1971** Greenpeace is founded.  
• *Not Not Not Not Not Enough Oxygen* by Caryl Churchill is broadcast on BBC Radio 3. The play is set in a dystopian 2010 of air pollution and street violence.

1974

**1972** *A Blueprint for Survival* by Edward Goldsmith and the editors of *The Ecologist* is published.

• The PEOPLE party is founded in Coventry, England, becoming the Ecology Party in 1975 and winning its first council seat in 1976.  
• David Holman's play *Drink The Mercury*, about the effects of heavy metal pollution on the fishermen of Minamata in Japan, is produced by Belgrade TiE, Coventry.

**1973** OPEC oil embargo inflicts worldwide economic damage.  
• E. F. Schumacher's *Small is Beautiful* is published.  
• Christopher Hampton's play *Savages*, about the extinction of the indigenous peoples of Brazil, is produced at the Royal Court Theatre, London.

**1974** *The Freeway*, a play by Peter Nichols about a giant traffic jam on a motorway, is produced by the National Theatre at the Old Vic, London.

**1975** Broadcast of the first episode of the BBC sitcom *The Good Life*, in which Tom and Barbara Good give up the rat race to become self-sufficient in Surbiton.

1978

**1978** The tanker Amoco Cadiz runs aground off northern France spilling 70 million gallons of crude oil.

# 1979

**1979** Publication of *Gaia: A new look at life on Earth* by James Lovelock, popularising his hypothesis of a self-regulating system that maintains the conditions for life on Earth.

- Release of *The China Syndrome*, a film about a television reporter and cameraman investigating a routine story at a local nuclear power plant. With a whistleblower, they expose a cover-up of failed safety procedures. The Three Mile Island nuclear accident in Dauphin County, Pennsylvania occurs 12 days later.

**1982** The United Nations adopts a World Charter for Nature, endorsed by every nation except for the United States.

**1983** Release of the film *Silkwood*, starring Meryl Streep as Karen Silkwood, a whistleblower on hazards at the Kerr-McGee plutonium plant in Oklahoma.

# 1986

**1984** Bryony Lavery's play *Origin of the Species*, about a female archaeologist's relationship with a prehistoric woman, is produced by Monstrous Regiment at Birmingham Repertory Theatre Studio.

- 'The Arts for The Earth' (TATE) programme is started by Friends of the Earth UK.
- In Bhopal, India, a chemical spill at Union Carbide's factory kills thousands.

**1985** On its way to protest at French nuclear testing in the Pacific, the Greenpeace vessel *Rainbow Warrior* is sunk by operatives of the French foreign intelligence services.

**1986** The nuclear reactor at Chernobyl explodes.



# 1987

**1987** Gro Harlem Brundtland, the Norwegian prime minister, publishes *Our Common Future* defining sustainable development as 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs.'

**1988** Global warming emerges as a public issue when NASA scientist James Hansen tells the US Congress that research indicates human beings are dangerously heating the planet, particularly through the use of fossil fuels.

- Rubber tapper, trade union leader and environmentalist Chico Mendes is assassinated by a rancher in Brazil.

**1992** Earth Summit in Rio: 1,600 scientists, including half the living Nobel Prize laureates, sign a petition warning about dangers of climate change. It fails to make the front page of the *New York Times*.

- Direct action anti-roads protests begin at Twyford Down in Hampshire, UK.
- *Still Waters* by Platform imagines the unburying of four tributaries of the River Thames – among the earliest of projects to uncover or 'daylight' a river.
- Tony Kushner's play *Angels in America: Millennium Approaches*, in which an angel descends to earth through a hole in the ozone layer, opens at the National Theatre, London.

# 1992

**1993** In Ben Elton's novel *Gridlock*, a city chokes on carbon monoxide.

# 1995

**1994** The Kyoto Convention, the United Nations Framework Convention on Climate Change, enters into force.

- Theresa J. May and Larry K. Fried publish *Greening up Our Houses: A Guide to a More Ecologically Sound Theatre*.
- Una Chaudhuri guest-edits an edition of the journal *Theater on ecology and performance*, which includes her seminal essay, "There Must Be a Lot of Fish in that Lake": Toward an Ecological Theater'.

**1995** Writer and environmental activist Ken Saro-Wiwa and eight other Ogoni campaigners are hanged by the military dictatorship in Nigeria.

# 2003

# 2000

# 1996

**1996** Road protester Swampy emerges from tunnels at Fairmile Camp, Devon.

• *Ecologies of Theater* by Bonnie Marranca is published, with essays on John Cage, Gertrude Stein, Robert Wilson, Meredith Monk, Rachel Rosenthal and Heiner Müller.

**1998** The release of the film *A Civil Action*, about a lawyer's eight-year battle with giant corporations over children poisoned by industrial pollutants.

**1999** The United Nations Kyoto Protocol is open for signature by countries agreeing to limit carbon dioxide emissions. The United States does not sign.

• In BBC Radio 4 drama *The Archers*, Tom Archer is acquitted on a charge of criminal damage, after admitting damaging a trial crop of GM oilseed rape.

**2000** Shakespeare scholar Jonathan Bate publishes *The Song of the Earth* about literature and environment.

• *Erin Brockovich* is released, a film based on a true story of contaminated water in a small town and one of the largest successful lawsuits in US history.

• 'BETWEEN NATURE: Explorations in ecology and performance', an international event bringing together performers, academics and activists, is held at at Lancaster University.

• Launch of the Ashden Directory, the first website for environmentalism and performing arts.

**2002** Futerra produce the film *The Seasons Alter* using a scene from Shakespeare's *A Midsummer Night's Dream* to warn of climate change. Titania is played by Cherie Lunghi, Oberon by Lloyd Owen, and Helena by Keira Knightley.

• Larsen B ice shelf in Antarctica collapses.

**2003** A summer heatwave caused, many argue, by human influences on the environment, kills 30,000 people in Europe.

• First Cape Farewell expedition of artists and scientists sails to the High Arctic to study global warming.

• Activist, environmentalist and scientist, Vandana Shiva speaks on 'Diversity and Celebration' in a lecture organised by the London International Festival of Theatre (LIFT).

• Playwright Chris Ballance, standing for the Green Party, is elected as Member of the Scottish Parliament for the South of Scotland.

# 2004

**2004** In his film *Super Size Me*, Morgan Spurlock eats McDonald's fast-food meals for a month. In March, McDonald's announces that by the end of 2004, the Supersize portions will no longer be available.

- *The Day After Tomorrow* is released, a Hollywood disaster movie about climate change which makes no reference to US consumption of fossil fuels.
- Steve Kurtz of Critical Art Ensemble charged with bioterrorism.

**2005** 'What the warming world needs now is art, sweet art': the author Bill McKibben wonders about the lack of books, plays and operas about climate change – 'It hasn't registered in our gut; it isn't part of our culture.'

- Hurricane Katrina devastates New Orleans. Sea surface warming caused by human actions is increasing the intensity of tropical storms.
- *The New Yorker* publishes a three-part series on climate change by Elizabeth Kolbert.
- The Royal Society of Arts (RSA) and Arts Council England launch 'Arts & Ecology', a series of symposia, commissions and publications.

**2006** Al Gore's book and film *An Inconvenient Truth* are released.

- Playwright Caryl Churchill writes *We Turned on the Light*, a libretto about climate change for Orlando Gough and The Shout, performed at the BBC Proms.
- The release of *Syriana*, a political thriller about corruption in the global oil industry.
- *Vanity Fair* and *Elle* produce special 'green' editions.
- The Royal Court Theatre, London, presents 'Hot Air', lectures by Chris Rapley, Head of the British Antarctic Survey, and John Schnellhuber, who devised the climate change 'Tipping Point' map of the world. The lectures were introduced by Caryl Churchill.

- Ibsen's play *An Enemy of the People* is revived by several companies, including the Shakespeare Theatre in Washington, DC, and Tara Arts, whose UK adaptation sets it in nineteenth-century British-ruled India.
- James Lovelock publishes *The Revenge of Gaia* in which he warns that planetary ecosystems and human life may not survive the accelerating pace of climate change and advocates nuclear power as the best immediate option for energy production.
- David Cameron, the Conservative Party leader, appoints Zac Goldsmith, editor of *The Ecologist*, as deputy chair of a policy review committee on the environment.
- The US National Oceanic and Atmospheric Administration announce that CO<sub>2</sub> levels have reached 381 ppm (parts per million) which is

100ppm above the pre-industrial average and higher than levels for the past 30 million years.

- Two plays dealing with indigenous peoples and the extinction of their cultures are revived: Peter Shaffer's *The Royal Hunt of the Sun* (first produced in 1964) at the National Theatre, London, and Christopher Hampton's *Savages* (first produced in 1973) at the Royal Court Theatre, London.

# 2006

# 2007

**2007** Al Gore and the Intergovernmental Panel on Climate Change (IPCC) share the Nobel Peace Prize 'for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.'

- The National Theatre, London and Royal Philips Electronics team up on a Green Switch initiative for lighting the fly towers.
- For the second consecutive year, the BBC commissions a work on climate change for the Proms: *The Water Diviner's Tale*, by Rachel Portman (music) and Owen Sheers (libretto).
- The United States Supreme Court in a groundbreaking decision rules that greenhouse gases are

pollutants, opening the door to litigations against industries producing high levels of carbon emissions.

- Live Earth concert for a climate in crisis takes place across every continent.
- The IPCC produces four scientifically authoritative reports confirming the human cause of global warming; warning of the impacts of climate change; and outlining the economic and lifestyle changes necessary to mitigate those impacts.
- Pope Benedict, speaking to a conference on climate change at the Vatican, urges Catholics to become far greener. The Vatican plans to install more than 1,000 solar panels.
- Arcola Theatre initiates Arcola Energy, aiming to make the theatre carbon neutral.
- The Eco Prize for Creativity is won by Puppet State Theatre for their production of *The Man Who Planted Trees*.
- The Simpson family save the town of Springfield

from environmental disaster in *The Simpsons Movie*.

- April 2007 is the hottest April since 1865 in Britain, and the preceding 12 months the hottest since records began in 1659.
- Floods in June in Britain force thousands from their homes.
- Monsoon flooding in the Indian subcontinent causes 14 million Indians and five million Bangladeshis to leave their homes.
- Al Gore wins two Oscars for his documentary *An Inconvenient Truth*. Receiving the award, he tells the audience, 'It's not a political issue. It's a moral issue.'
- Rajendra Pachauri, chair of the IPCC, says after the Bali Agreement to negotiate a new climate change treaty by 2009: 'If there is no action before 2012, that is too late. What we do in the next two to three years will determine our future. This is the defining moment.'

# 2008

**2008** The Ashdenizen blog on culture and climate change is started.

## 15 February 2008 brrring, brrring

The news that 40% of the world's oceans have been heavily affected by pollution has been headlined as a 'wake-up call'.

This over-worked phrase has shifted slightly since it first surfaced in 1976 to describe placing a request with the hotel front desk to receive a call the next morning. In its original sense, a wake-up call wouldn't be unexpected and wouldn't be news.

'Wake-up call' joins 'saving the planet' as one to avoid.

RB

**25 February 2008**  
**going the distance**

Two years ago at the Royal Court Theatre, London, playwright Caryl Churchill introduced Chris Rapley and John SchnelInhuber by saying that climate change was tough to write about for a playwright because of 'the distances'.

Those distances are spatial and temporal: what A does in one country affects B in another; what C does in one century will affect D in another. These aren't easy issues to put on stage.

James Garvey, secretary of the Royal Institute of Philosophy, has just written a very good, short and accessible guide to exactly these questions. In *The Ethics of Climate Change* he says that 'we are accustomed to thinking about individual, easily identified harms which are local, right in front of us in both space and time ... Now, cumulative and apparently innocent acts can have consequences undreamt of by our forebears.'

He describes the 'atmosphere' as a common resource, like a village well. It is also a finite one. Whoever pollutes it, harms others; and justice, of course, expects those who harm others to stop doing so, and (where possible) to make amends for the damage done.

The problem, as Voltaire wrote, is that 'no snowflake in an avalanche ever feels responsible'.

RB

2008

**1 April 2008**  
**artists and activists**

There's a good argument for suggesting that activists and artists shouldn't spend their weekends hanging out together.

This argument might take the James Joyce approach: art stops time ('aesthetic arrest'). It has no purpose other than itself. Art that tries to titillate turns into pornography; art that tries to motivate turns into propaganda. To give art some ulterior purpose is to distort it.

Or the argument might take the Chekhov approach: it isn't the artist's job to solve the problems of society. It is the artist's job to state the problems correctly. Chekhov was a proto-environmentalist not because he was an activist, but because he was highly alert to 'the collisions in our lives between nature and culture'.

Two immediate problems face the artist-as-activist. The first was raised by Philip Pullman at last year's TippingPoint event in Oxford when he said an artist is simply not in control of how his or her work is received. People make of it what they will.

The second problem for the artist-as-activist is highlighted in Anthony Lane's recent *New Yorker* piece, 'Master and Commander: Remembering David Lean'. If the artist is any good, the work has its own imperatives. Describing Lean's approach to *This Happy Breed* in 1943, Lane says that the director was 'content to make films with propaganda value, but the shape of the film at hand was what absorbed him.'

RB

• Voters in Ecuador approve a new progressive constitution which gives nature the same rights as human beings.

• The London Mayor's 'Green Theatre – Taking Action on Climate Change' programme launched, aiming to reduce by 60% the energy used by London theatres by 2025.

• BBC2 broadcasts *Burn Up*, a thriller about the oil industry and climate change written by Simon Beaufoy.

**7 April 2008**  
**hold the main stage**

When David Hare said theatre could prepare us for things we'd like to avoid but cannot, he was referring to bereavement and grief. But he might just as well have been talking about climate change.

Except, that is, that hardly any major playwright has even mentioned climate change. The only two (as far as I know) that have made any significant contributions to the debate are Caryl Churchill and Václav Havel. Most playwrights feel more at home discussing moral and political climates.

In a recent interview, David Hare stressed what an extraordinarily rich time this has been for political dramatists. He spoke of 9/11, the Iraq War, Bush, Blair and so on. But the sequence of reports that have emerged from the IPCC (in 1990, 1995, 2001 and 2007), reports that have fundamentally changed the way many people view the world's future, didn't get a mention.

Climate change is the front page story that never makes it onto the main stage.

RB

**6 May 2008**  
**the singularity of the event**

For the last 500 years 'the word "theatre" generally has meant a walled building that allows artists to exercise heightened aesthetic control by cutting out the natural world around them', according to actor and academic Rush Rehm.

In his book *Radical Theatre: Greek Tragedy in the Modern World*, Rehm contrasts the conventions of theatrical realism with Greek theatre in the fifth century BCE, which he describes as having a completely different theatrical 'aesthetic'. It was

aggressively public, part of the ongoing life of the city, subject to the forces of nature (the major dramatic festival took place in early spring, the lesser ones in winter), played against a backdrop of the polis, acted out on a beaten earth orchestra, with the land, sea, and sky beyond.

Roland Barthes observes that, in such performances, 'the spectator's immersion in the complex polyphony of the open air (shifting sun, rising wind, flying birds, noises of the city) restores to the drama the singularity of the event.'

RB

**8 May 2008**  
**telling a green story**

If you are trying to implement environmental change within a theatre, it's important to avoid the idea that this is just a new way of making people feel bad about themselves. The last thing anyone wants is another inspector with a clipboard going round checking up on them.

Each area of the theatre has its own processes (and carbon footprint) and the people who understand those areas best are the people working within them. So start by empowering those people. Make it clear that every aspect of a theatre reflects the creative energies and values of the theatre as a whole.

Don't talk about cuts, reductions and banning things. Talk about where things come from, where things go, and how those processes might be reimagined. It's this narrative, the one that runs from where things are sourced to where the waste ends up, that fundamentally reflects a theatre's place within its community.

Start with the view that everyone within the organisation can be smart and ingenious and think outside the box. Everyone in the building is involved in telling this story.

RB

2008

• 'Climate of Concern', three days and nine plays on the environment, takes place as part of the New York Institute for the Humanities Festival.

• Arcola Theatre opens Simple 8's production of *The Living Unknown Soldier* powered entirely by a 5kW hydrogen fuel cell.

• 35 productions at the Edinburgh Festival Fringe connect with the environment, animals or climate change, more than in any previous year.

**9 May 2008**  
**the joke climate changes**

A few months ago I wrote an article asking why there were no jokes about climate change. The largest A-Z joke book I could find didn't have a single entry for 'climate change' or 'global warming' or 'environment' or 'earth' or 'planet'. To get things going I came up with a lightbulb joke.

Q: How many climate sceptics does it take to change a lightbulb?

A: None. It's too early to say if the lightbulb needs changing.

People are now posting new lightbulb jokes of their own. Dozens of them. My favourite so far:

Q: How many climate sceptics does it take *not* to change a lightbulb?

A: Approximately 100. One to say that the current absence of light is the result of natural solar cycles and the other 99 to disseminate this finding through their 'science organisations' and oil industry-funded think tanks.

The responses give an idea of the number of points that can be made. Here's a selection:

Q: How many climate sceptics does it take to change a lightbulb?

A: None. It's more cost-effective to live in the dark.

A: None. We only know how to screw the planet.

A: None. Changing lightbulbs is for engineers.

A: None. Eventually the lightbulbs will right themselves.

A: First we need more research and we need more research about what that research will be.

A: I can't hear you! I can't hear you! I can't hear you!

RB

**14 May 2008**  
**mostly about animals**

The philosopher Timothy Morton has suggested we are in a kind of Celtic twilight, becoming most aware of things at the moment we are destroying them. He has spoken of the sense of excitement, and then the sense of melancholy (and even mourning), that accompanies going 'deeper into the interconnectedness of everything'.

Morton said his next book *The Ecological Thought* would be 'mostly about animals'. It was clear that humans had been decentred by the dual impact of Darwin (who was 'really helpful for progressive ecological thinking') and Derrida ('deconstruction is ecology's best friend').

This kind of thinking would pose an extraordinary challenge for twenty-first-century playwrights: how to write plays in which humans were only bit-part players.

RB

**19 May 2008**  
**legal functions**

There was a distinguished line-up at the Tricycle Theatre last night for a one-off performance of extracts from Philippe Sands' new book *Torture Team*. The book details how half a dozen lawyers within the Bush administration paved the way for the introduction of torture.

A clip from the judge's summing up in the 1961 film *Judgment at Nuremberg* was also shown. The film was inspired by the 1947 case *United States of America v. Josef Altstoetter et al.* As Sands writes in the May 2008 issue of *Vanity Fair*,

The case is famous because it appears to be the only one in which lawyers have ever been charged and convicted for committing international crimes through the performance of their legal functions.

As Sands rightly stresses, it would be absurd to make any factual or historical comparisons. The point is to pursue 'the underlying principle'. The lawyers were seen to be accomplices.

This underlying principle must also apply to environmental crimes and decisions that relate to climate change. In his *London Review of Books* essay 'On Thinning Ice', the international lawyer Michael Byers says that as so much is now known, 'Governments that today refuse to prevent climate change may well come to be regarded in the future as having perpetrated international crimes.'

One day, perhaps, the Tricycle Theatre will be staging a 'tribunal play' about that.

RB

2008

**27 October 2008**  
**art, ads and agit-prop**

There is a 'tricky relationship' between art and green thinking. There's propaganda, which has a single message, and there's art, which has many possible interpretations, and then there's political art, which exists somewhere in between the two.

Any work that tries to raise public consciousness about an issue (and stimulate a response) would appear, broadly speaking, to be political art. That's a category, of course, that's embraced everything from Picasso's 'Guernica' to David Hare's *Stuff Happens*.

There's also a vein of stylish and imaginative work emerging about climate change that has more to do with advertising than agit-prop. That's laudable enough if it expresses your point of view (and it does mine).

But these posters, ads and videos are going to value slickness, entertainment and superficiality. Why? Because they're employing the language and tone of consumerism to promote lifestyle choices. For many Greens, there's going to be an inherent contradiction there.

The range of creative responses to climate change is going to call for a new set of tools (a new taxonomy, perhaps). The first approach that comes to mind is the one that puts 'propaganda' at one end of the spectrum and 'art' at the other. But there'll be propaganda with high aesthetic value. And there'll be works that seem to be protesting but actually refuse to be pinned down. ('Blowin' in the Wind' would be a classic example from the Sixties.)

There's likely to be terrific tension between the urgency of the issue and the aesthetic challenges it presents (even assuming that this is something that needs to be aestheticised). A critical framework is essential. Climate change is going to cause enough damage without it being responsible for a lot of bad art.

RB

**28 October 2008**  
**two oppositions**

A reader says yesterday's blog was 'harsh' on green advertising campaigns:

Are you saying that the connection between the language of consumerism to promote lifestyle choices necessarily produces superficial activities? I think that there's a connection between the aesthetics or the 'how' of a 'message' being delivered and the message itself. But I also think that for some people, the actions that they might take in response to that may be significant for them, meaningful for them, in ways that can't be predicted.

To clarify, there are two oppositions here. One is between green thinking and consumerism and the contradiction involved in using consumer techniques to push green messages. Consumer advertising has a dominant tone/style that's hip, jaunty and sexy and this tone largely crowds out other voices, emotions, experiences. It's as if green messages are having to dress up in someone else's clothes to gain any visibility. At some level, form affects content.

The other opposition is between advertising, which closes down meaning to push a single message, and art/literature, which opens up meaning and possibility and doesn't try to control how it's interpreted.

It's not that the activities that green campaigns promote are superficial. It's that a campaign poster or ad or video has to be instantly digestible. As a form of communication, this can make it superficial. The actions that flow may well be beneficial and meaningful, but judging that isn't part of critical discourse about the arts.

RB

2008



**12 November 2008**

**why theatres don't touch climate change**

The nature of climate change (how it affects other people in other countries and how it will affect other people in other centuries) makes it a unique challenge to theatre.

The impact of individual actions spreads out, very diffusely, across time and place. It's hard to see how this can be addressed within the classical dramaturgical model of cause and effect. It's one reason why no major theatre has staged a play on the subject.

But there are five other reasons why theatres don't touch climate change.

1. Theatres think climate change is about science and so it's going to be extremely technical. But it isn't. It's about drama's core themes: human relationships, the way we live, what we value.

2. Theatres are worried they'll be accused of hypocrisy, so they are going to need to get their house in order first. But this is not a 'them and us' subject where you have to be greener-than-green before you can talk about it. Everyone's implicated, everyone's involved. Theatres should be open about that.

3. Theatres are holding off engaging with this subject (as one theatre director told me) because they're not sure what they think about it. But not knowing what you think about something is the perfect moment to engage with it.

4. Theatres imagine the plays will either have to be agit-prop or apocalyptic and they don't want to do either. But climate change is driven (as the great American biologist E. O. Wilson has said) by our high levels of per capita consumption: where stuff comes from and where it goes. Climate change is about everyday life.

5. Many of the leading fossil fuel companies are prominent sponsors of the arts. Oh yes, good point.

RB

2008

**25 November 2008**  
**instinct for the times**

Philip Pullman has rightly called climate change 'the most important challenge the human race has ever faced'. But the news hasn't reached everyone. Take political playwrights.

Imagine someone in 50 years' time trying to understand what people were thinking or feeling about climate change by reading some of the plays that had been staged in 2008. OK, so theatre isn't journalism. There's going to be a time-lag. But nearly 20 years after the first IPCC report, the answer would be: people weren't thinking about it at all. It had barely impinged.

RB

• Barack Obama is elected president of the United States. He comes to the job with an energy policy: reducing greenhouse gas emissions by 80% by 2050; ensuring 10% of electricity comes from renewable resources by 2012; putting plug-in hybrid cars on the road; and investing in a

clean energy future. He also has an arts policy – to expand public/private school arts partnerships; create an artists corps; champion the importance of arts education; and provide health care and a fair tax programme for artists.

**30 March 2009**  
**no hiding from this story**

This blog has suggested before that Greek drama, with its focus on hubris, offers rich source material for plays on climate change. As the issue of climate change refugees becomes increasingly urgent there's another Greek narrative that offers a ready template: *The Odyssey*.

In *Le Monde* today, Jacques Mandelbaum and Thomas Sotinel place *Welcome*, a new film about a swimming instructor who helps train a young Kurd to swim the channel, in a tradition that includes Jean-Pierre and Luc Dardenne, Ken Loach, Stephen Frears and Costa-Gavras. They argue that this type of story will only increase as the rich countries: 'multipliaient les mesures répressives et dissuasives à l'encontre des migrants'.

The range of extreme risks undertaken by illegal migrants gives these stories the appeal of 'un modern Ulysse'. (Except, of course, that Odysseus was heading in the other direction: he was on his way home.)

The authors also suggest that another character is vital to the success of *Welcome*: the citizen who is suddenly confronted by the situation of the illegal immigrant. It's through these characters ('les intercesseurs') that the audience enters these hidden worlds.

RB

2009

**12 April 2009**  
**theatre in 25 years**

In the 25th anniversary issue of *American Theatre*, 25 practitioners were asked how they imagined theatre in 25 years time. Here are ten of their ideas about the future.

1. Theatre will mix both local and virtual communities.
2. Ways of producing will flourish that have less impact on the planet.
3. Social settings (clubs, bars, living rooms), site-specific locations, galleries, black boxes, parks, community centres – will become the new normal.
4. Artists will band together in small communities rather than living as travelling mercenaries.
5. Movies and TV will be quaint nostalgia, as will laptops, iPods, PlayStation and other gadgets.
6. No space will be safe from theatre. It will happen anywhere.
7. The sector will realize that all theatre is local.
8. American theatre will dramatize a changing America, neighbourhood by neighbourhood, city by city, region by region.
9. A regional theatre will present a five-play season that only features one show from a European-centered perspective.
10. You'll bring your own text (SMS), your own soundtrack (iPod), light your own show (LED), and use onstage toilets.

RB

**2009** President Barack Obama inaugurated in January: 'We will harness the sun and the winds and the soil to fuel our cars and run our factories ... And to those nations like ours that enjoy relative plenty, we say we can no longer afford indifference to the suffering outside

our borders, nor can we consume the world's resources without regard to effect. For the world has changed, and we must change with it.'

- The RSA hosts the Chico Mendes Legacy Lecture, in association with the Young Vic and People's Palace Projects.
- Arcola Energy and Arcola Theatre start Green Sundays, opening the theatre on the first Sunday of each month as a meeting place for projects on arts and sustainability.

- One billion people take part in Earth Hour by switching off their lights at 8:30 p.m. to mark the beginning of the UN Climate Panel's meetings.

- The US Environmental Protection Agency terms heat-trapping gases as pollutants, and will regulate them for the first time.

- Mike Hulme publishes *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity*.

**2 May 2009**  
**just one word**

Mr McGuire: I want to say one word to you. Just one word.

Benjamin: Yes, sir.

Mr McGuire: Are you listening?

Benjamin: Yes, I am.

Mr McGuire: Plastics.

When Mr McGuire in *The Graduate* said plastics had a future, he might not have fully appreciated what kind of durable future that would be.

The *Times* reports today on the giant, spiralling plastic rubbish dump between Hawaii and Alaska.

RB

2009

**8 June 2009**  
**what can't be said**

On this morning's *Start The Week*, John Keane, author of *The Life and Death of Democracy*, was asked about the arts and the development of democracy, from the Greeks onwards, and the function artists might have today.

It's a long story, but this connection begins most clearly in the Greek world where, for example, theatre – tragedy and comedy – operate in parallel to the polis, to the decision-making assembly. Theatre is theatre for the citizens. There is, for example, the election by lot of judges. The chorus – all-male, playing female roles – utters things that are not otherwise said. So there is a very strong and deep connection between democracy and theatre.

The rest of the story is incredibly complicated. During the twentieth century, we see growing tensions between parliamentary democracy and art, and that's not necessarily a bad thing. Through art can be expressed things that cannot be said or cannot be done within the field of formal politics.

The distinction seems slight, but significant. For the Greeks, it was 'not otherwise said'; for us, it is 'cannot be said'.

RB

**22 June 2009**  
**the action of telling stories**

On Saturday afternoon, 15 people – writers, academics, activists – sat round a table for three hours discussing climate change stories at a seminar sponsored by Artists Project Earth and hosted by Artsadmin. The theme was displacement and migration. Here's a sample of the points made.

*The way in which we tell climate change stories is a political act.*

1. After Hurricane Katrina, for instance, the displaced inhabitants of New Orleans were described as 'refugees', 'diasporees' or – the term insisted on by some NGOs – 'clients'.
2. The meta-narrative of climate change can be imposed on poorer societies by richer ones (we've given you the problem, now we're giving you the way to interpret it).
3. Local politicians can adopt this as a way of increasing their profile. If you are interested in keeping a community's stories vibrant – for that community – you may want to resist the introduction of overarching stories from outside.
4. Poverty and environmental degradation are intimately connected. Poor people are experts on poverty. They know a large part of the problem is official corruption and weak infrastructure.
5. Migrants enrich societies. As someone who had to flee New Orleans wittily wrote in public to the prospective hosts who had offered hospitality, 'One thing's for sure – your food is about to get better.'

*Climate change impacts on formal and aesthetic questions*

1. Climate change is altering our sense of structure in fiction. In particular, the treatment of time. This change is not primarily driven by experimental interest in form, but by the urgency of the subject matter (e.g. *Age of Stupid*).
2. Climate change narratives can be worthy, monotone, monochrome and second-rate. Art is complicated. It finds beauty in tragedy. Humour captures our attention. So, too, does heroism and hope.
3. We can describe what's happening now and what we imagine things will be like in the future. It's hard to convey the process that will carry us between the two points.

*A story about activism is itself activism*

1. After the action (e.g. shutting down Kingsnorth power station) comes the story about the action (*A Time Comes*, the 2009 film by Nick Broomfield). The story is also an action.
2. Climate change insists we revise our sense of place in the world. This is not a simple question of problem solving. We need to hear from many voices. We need a rich politics of climate change.

RB

**1 October 2009**  
**thin, narrow and superficial**

In this blogger's experience, it's all-too-easy for a commitment to green issues to become a quick way of making judgements about other people and their actions. In that respect, it's just another form of puritanism.

In his essay on the historian Thomas Carlyle, the Victorian writer John Morley captures the wrongheadedness of this approach:

Nowhere has Puritanism done us more harm than in ... leading us to take all breadth, and colour, and diversity, and fine discrimination, out of our judgements of men, reducing them to thin, narrow, and superficial pronouncements upon the letter of their morality, or the precise conformity of their opinions to accepted standards of truth, religious or other.

Among other evils which it has afflicted, this inability to conceive of conduct except as either right or wrong, and correspondingly in the intellectual order, of teaching except as either true or false, is at the bottom of that fatal spirit of parti-pris, which has led to the rooting of so much injustice, disorder, immobility, and darkness in English intelligence.

RB

2009

• *The Contingency Plan* by Steve Waters, a double bill of plays 'from the frontline of climate change', opens at the Bush Theatre, London.

• *Earth Matters on Stage*, a symposium on theatre and ecology, and the *Ecodrama Playwrights Festival* are hosted by the University of Oregon.

**23 November 2009**  
**knowing where you're coming from**

What Mike Hulme does in his new book *Why We Disagree About Climate Change* is a little like what Elliot Kupferberg, the psychiatrist played by Peter Bogdanovich in *The Sopranos*, does. Both pick away at the seeming neutrality of the authority figure and reveal a dynamic that's more complicated and human.

The central thread of *The Sopranos* is the relationship between the volatile Mafia boss, Tony Soprano, and his immaculately composed psychiatrist, Dr Jennifer Melfi. Tony Soprano leads a violent and emotional life and once a week he explains how he feels about things to the rational and detached Dr Melfi.

But psychiatrists themselves go to see psychiatrists, so it's a dramatic moment when the tables turn, and Dr Melfi discusses her own troubles with her psychiatrist, Dr Kupferberg.

In the same way, Hulme argues in *Why We Disagree About Climate Change* that the climate change debate isn't simply about rational people trying to get irrational people to see some sense. Everyone who joins the climate change debate is operating within sets of values that need to be examined and understood.

These values inform our attitudes, for instance, to risk, science, justice, nature and culture. How we think about these subjects will largely determine how we think about climate change. We also tend to interpret the world (however subconsciously) through the great literary or Biblical narratives. And these stories resonate in very different ways.

To be effective in this climate change discussion, perhaps we need, like psychiatrists, to find out where we're coming from.

RB

**1 December 2009**  
**out of the window**

Today, 35 of the world's leading climate research institutions gave a warning about sea level rises based on their report *Antarctic Climate Change and the Environment* (Scientific Committee on Antarctic Research, 2009).

Their warning is the front page story in today's *Times*. Benny Peiser, director of the new Global Warming Policy Foundation, was asked to comment. (The GWPF website states that 'Our main purpose is to bring reason, integrity and balance to a debate that has become seriously unbalanced, irrationally alarmist, and all too often depressingly intolerant.') Peiser said, 'The predictions come in thick and fast, but we take them all with a pinch of salt. We look out of the window and it's very cold, it doesn't seem to be warming.'

So a report from 35 climate research institutions is rejected by a guy saying, 'Hey, look out the window, it's cold today'. Not sure where the integrity and balance lies there.

RB

• Major exhibitions on climate change and the arts are staged in the months running up to the United Nations Climate Change Conference, COP15: *C Words*, by Platform (Arncliffe, Bristol); *RETHINK* (galleries across Copenhagen); *eARTh Art of a Changing World* (Royal Academy of Art, London); *Radical Nature* (Barbican, London); *FutureSonic*, (galleries across Manchester); *Climate for Change* (FACT, Liverpool); and *Two Degrees* (Artsadmin, London).

• TippingPoint announces plans for four commissions of up to £30,000 each for the creation of new performances that have to do with climate change.

• The United Nations Climate Change Conference, COP15, is held in Copenhagen 7-18 December, with no binding agreement reached.

2009

**22 December 2009**  
**the one about the ordinary situation**

Last year this blog asked where were all the green jokes? Quite a few surfaced on the internet after that, but still only a tiny fraction when you consider the scale of the subject.

So we tuned into this week's edition of *Word of Mouth* on BBC Radio 4 which was looking at what makes a joke funny, to see if there were any tips for more laughs about climate change.

One guest on the programme, a professor of social sciences, explained there are lots of jokes about sex, race, and lavatories, and very few about gardening. We make jokes about topics that make us anxious or aggressive. (Well, climate change makes plenty of people anxious and aggressive.)

The prof explained that Freud said jokes are a way of expressing things that we normally can't express and Henri Bergson said laughter depends on an anaesthesia of the heart, a certain cruelty.

A classic joke has a structure, the prof went on: it's a fantasy story which builds to a punchline which – even though we know it's coming – will catch us unawares. (We know climate change is coming, but it will still catch us unawares.) But jokes are also culture-bound, they're often related to moments of embarrassment in ordinary situations.

So that was it. There aren't many climate change jokes because it isn't an ordinary situation. It isn't culture-bound. Or not yet.

RB

**11 February 2010**  
**rack the value**

Pavan Sukhdev, a special adviser to the United Nations Environment Programme's 'Green Economy Initiative', argues that the economic invisibility of nature in our dominant economic model is both a symptom and a root cause of the rapid decline in biodiversity and ecosystems. We value, he says, what we price.

If Shakespeare is right, though, whatever price we put on nature now, we'll put an even higher price on it when it's gone. As the Friar points out (a little sententiously) in *Much Ado About Nothing*:

For it so falls out  
That what we have we prize not to the worth  
Whiles we enjoy it; but being lacked and lost,  
Why, then we rack the value.

RB

# 2010

**2010** A workshop at Tate Modern, 'Disobedience Makes History', led by the Laboratory of Insurrectionary Imagination, ends with participants posting a banner stating 'ART NOT OIL' from the gallery windows. Actions and interventions by groups opposed to the sponsorship by BP of the Tate and other major art institutions continue all year.

- The British Council and Julie's Bicycle publish a collection of essays *Long Horizons. An Exploration of Art and Climate Change.*
- The National Theatre, London and Arts Council England host 'A Low Carbon Future for the Arts?' conference.

- Ian McEwan's *Solar*, a satirical novel focusing on climate change, is published.
- The Royal Society and Tate Modern host 'Rising to the Climate Challenge: Artists and Scientists Imagine Tomorrow's World' symposium.

**18 March 2010**  
**as the snow melts**

Stephen Fry said on the TV show *QI* that spring advances in the UK – from the south to the north, obviously – at a speed of a third of a mile an hour.

Turns out things happen more briskly in the United States. The 4th/5th grade class at the Paideia School in Atlanta measures the progress of spring – as defined by the first daffodil blooming. They do this by writing to post office directors from the tip of Florida to the top of Maine, and asking them to mail back a postcard with the date of the first sighting of a daffodil. The class follows it all on a map with coloured pins, etc., and finds the speed of spring on the East Coast.

The research has shown the southernmost daffodil arrived in Alma, Georgia on 21 January, and the northernmost daffodil arrived in Fort Kent, Maine on 7 April (2009). The distance was 1780 miles in 76 days, 23.4 miles per day or one mile an hour. That's three times the speed that spring moves in the UK.

Our co-editor Kellie Gutman was asked by the Paideia School teacher, Peter Richards, to be one of the spotters. Kellie fits the target area for spotters, as she lives within five miles of US Route 1, which runs from Florida to Maine, and takes in Miami, Jacksonville, Augusta, Columbia, Raleigh, Richmond, Washington, Baltimore, Philadelphia, Newark, New York, New Haven, Providence, Boston, and Portland. Peter sent her the postcard ready to be filled out and mailed at the first sighting of a daffodil.

Two weeks ago, Kellie went to the spot in her garden where she expects to see the first flower. Nothing but snow. But Boston hit 65 degrees this Wednesday and it's expected to be warm all week.

RB

- Ash plumes from eruptions of the Eyjafjallajökull volcano in Iceland force the closure of European air space.
- UK coalition government formed

between Conservatives and Liberal Democrats in May promises to be the 'greenest' government ever. Caroline Lucas is first Green Party MP elected to Westminster.

- Explosion on the Deepwater Horizon oil well in the Gulf of Mexico kills 11 people and starts an oil spill spreading across the region.

## 5 August 2010

### ten things you need to know about 'earthquakes in london'

1. *Earthquakes in London* is the National Theatre's first climate change play.
2. The writer, Mike Bartlett, had a big critical hit last year with *Cock*; the director, Rupert Goold, had an even bigger hit with *Enron*.
3. *Earthquakes* lasts three hours; a sprawling story that spans from 1968 to 2525 with a cast of 70-80 characters.
4. The central figure, Robert Crannock, an atmospheric physicist with three estranged daughters, is based on James Lovelock (the science, not the relationship with the daughters). Crannock thinks it's a waste of time to recycle. He believes the planet can only cope with a billion people (and five billion will have to go).
5. Bartlett was inspired by a quote from Lovelock comparing the current situation to the Weimar Republic: 'Enjoy it while you can'. In theatre, Weimar Germany equals *Cabaret*. So the set is a cocktail bar that snakes through the auditorium with members of audience sitting on bar stools or leaning against railings, and actors performing on the bar table: *Cabaret* meets climate change.
6. Add to this, multiple plot lines: one daughter is environment minister in a coalition government with a marriage on the rocks who is tempted to join the aviation industry; another is about to have a baby; a third is an alcoholic who goes with a guy who next morning wants to blackmail her because his family are climate change victims in Eritrea.
7. What you get is a disjuncture between the plotiness of the play and the showy big-night-out manner in which it's been staged. The production is colourful and immersive, but that doesn't take you deeper into the lives of the characters.
8. The punchiest speech is the attack on the baby-boom generation for wrecking the planet ('We've got about five years left before it's too late, so you'll forgive me if I don't wait for the next election'), but it doesn't have the impact on stage it has in the text.
9. In the last 15 months there have been two climate change plays with Lovelock characters. The other was Steve Waters' double bill *The Contingency Plan*. (One actor, Geoffrey Streatfeild, has been in both.)
10. *The Contingency Plan* was better: more focussed, more authoritative, more laughs.

RB

## 31 August 2010

### the effects of entitlement

It's this blogger's view that Joseph Conrad's *Heart of Darkness* is the most influential 100 pages of the last 110 years. For those interested in climate change and culture, its special achievement is that it's a work of art that addresses an immediate moral concern – the slave trade in the Congo – but gives that concern a much wider and deeper significance.

Some credit for its current status as one of the most widely studied texts in our culture must go to others. T. S. Eliot took the epigraph for 'The Hollow Men' (1925) from the novella. Orson Welles and the Mercury Theatre did a radio version in 1939. In 1979 Francis Ford Coppola's *Apocalypse Now* introduced the story, in a very different context, to a new generation of filmgoers.

And now there's a graphic novel by Catherine Anyango. The graphic artist describes the book's relevance today in terms which will be familiar to those following the climate change debate:

It's about the idea of entitlement; [how] through the ages we enforce our feelings of entitlement in whatever way that age will allow from Leopold II owning the Congo as a private possession to the corporations involved with blood diamonds. The effects of entitlement have not so much gone out of fashion as out of sight.

RB

- Publication of *In-Flight Entertainment*, a collection of climate change short stories by Helen Simpson.
- *3rd Ring Out: Rehearsing the Future*, a play by METIS Arts, is the first of a series of commissions by TippingPoint.
- *Uncivilisation*, the Dark Mountain Festival, takes place.

- Floods in the Indus River basin of Pakistan cover one-fifth of the country's land area and affect 20 million people.
- London International Festival of Theatre and the ICA present a panel discussion 'The Climate for Theatre'.

- *Earthquakes in London* opens, the first play produced by the National Theatre, London about climate change.

# 2010

**12 September 2010**  
**the game-changer**

The likely impacts of climate change present a challenge – philosophical and cultural – to some of the most basic assumptions about who we are and what kind of civilisation we want. In doing so, it repositions humanity and humanity's sense of what it is to be human. It is, in short, a game-changer.

If we accept that position, which this blog does, then we see that culture is not an add-on to the subject of climate change or simply a means of communicating more effectively about it. Culture is the process by which we come to understand, and live through, its wider implications. Historically, culture and the arts have been one of the main ways in which people have tried to understand significant shifts in human values.

This is not to suggest everyone has to rush out and paint pictures or write plays about climate change. It is more subtle than that. In the nineteenth century, the publication of Darwin's *Origin of Species* affected artists' work in many areas, both explicitly and implicitly. In the twenty-first century, the bleak news contained in the IPCC reports may have an influence as far-reaching.

T. S. Eliot wrote that Stendhal, Balzac and Flaubert were 'analysts of the individual soul as it is found in a particular phase of society'. The IPCC reports have introduced a new 'particular phase of society'.

It's encouraging that more and more artists, writers and performers are finding ways of responding to this development. And they are doing so in many different ways. But there's a sense that the critical framework, within which this work can be discussed, is largely absent.

RB

- The Jellyfish Theatre, a temporary structure built of reclaimed materials, opens in London. Two ecological plays, *Oikos* and *Protozoa*, are commissioned for the space.

- WWF publishes *Common Cause: The Case for Working with our Cultural Values*. The report recognises that the values people hold are important in motivating change.

**14 October 2010**  
**is 'junk' a celebration or a critique of waste?**

'Junkitecture' is a clever term, combining design and 'waste'. But what if the materials used for buildings, for sets, for props, for puppets, for the vehicles and floats of parades, were thought of simply as 'materials'? Of course, they would have a special value or feel if they had been used for something else. But to call them 'junk' is to share the attitude that separates the 'new' from what we think of as 'waste'. What is happening with the use of materials in the arts that have a history can often be more of a valorisation of consumerism and excess, a celebration of trash as 'trash' or salvage, than a critique of waste or an affirmation of recycling.

What if no special claims could be made for using reclaimed or recycled materials because it was commonplace? Then, what would be remarked on would be the design, the space or object itself, and the qualities that the materials brought to it.

The Jellyfish Theatre building was enchanting for its design and for its transiency, a theatre space in a symbolic shape, assembled from what was to hand, played in, and then dispersed, the theatre becoming again the material that it was, maybe to be used again, having acquired another layer of history.

WH

- The Deepwater Horizon oil well is sealed in the Gulf of Mexico, 153 days after the explosion.
- 10:10:10: A day of global positive actions on climate change.
- Richard Mabey publishes *Weeds: How vagabond plants gatecrashed civilisation and changed the way we think about nature*.
- British Museum Director Neil

MacGregor concludes his BBC Radio 4 series 'A History of the World in 100 Objects' with the solar-powered lamp and charger.

- COP16, the UN Climate Change Conference takes place in Cancún, Mexico. The agreement reached, considered a fragile lifeline, acknowledges the need to keep the temperature increase to 2C, sets up a green

climate fund to help poorer countries adapt and gives financial support for the preservation of forests.

- *Mediating Change*, a series of four panel discussions on culture and climate change, is made available as online podcasts.



**20 January 2011**

**from no plays about climate change to three in a month**

It was only a couple of years ago that this blog was writing about why theatres don't touch climate change. It seemed, at the time, as if there was something about theatre, or the way people conceived of mainstream theatre, that made the subject almost impossible to treat. This was part of a more general avoidance of the environment as a subject for the performing arts. The Ashden Directory was launched, back in 2000, as a way of following and encouraging those works which did engage with this subject.

But now things are changing. Eighteen months ago there was, finally, a good play about climate change. It was also possible to see the green shoots of climate change theatre in the works, for instance, of playwrights Wallace Shawn and Andrew Bovell.

Fast forward to January 2011, and this month alone three climate change plays will open in London – *Greenland* at the National, *The Heretic* at the Royal Court, and *Water* at the Tricycle.

Why is this important? Because climate change alters the way we think about our lives. The news contained within the various IPCC reports will be as influential, as paradigm-shifting, on the way we see ourselves as Darwin's *Origin of Species*. It is, ultimately, a question of values and relationships. As such, it is a natural subject for theatre.

RB

2011

**2011** *Greenland* written

by Moira Buffini, Matt Charman, Penelope Skinner and Jack Thorne opens in the Lyttleton Theatre at the National Theatre, London.

• *The Heretic*, a play by Richard Bean about a climate scientist, opens at the Royal Court Theatre, London.

• *Water*, a play about climate change by Filter Theatre Company, opens at the Tricycle Theatre, London.

**11 February 2011**

**two very different plays about climate change share some things in common**

'Climate change drama is the new growth industry', writes Michael Billington in today's *Guardian*. Well, about bloody time.

*Greenland* opened at the National on 1 February, and Richard Bean's *The Heretic* opened at the Royal Court last night. They couldn't be more different.

*Greenland* has four authors, multiple storylines and an anxious desire to reflect the range of positions people have taken on the subject. *The Heretic* is the work of one author, its science is about as plausible as its plot-line, but it's got some great characters and some very funny jokes.

If the two plays are similar at all, it's in what they don't achieve. Neither play catches the intensity of feeling that surrounds these issues in the developing world. Both are Eurocentric – although understanding how one half of the world impacts on the other is central to the subject.

Nor does either play give a genuine sense that the news contained within the IPCC reports changes our view of the world, and our place in it. The reports do this, and they do it as profoundly as Galileo stating that the earth revolves around the sun or Darwin stating that all species of life have a common ancestry.

These are ideas that can't be speedily researched by playwrights. They raise large philosophical and ethical questions. (The first report was published in 1990, so we've had 20 years to think about it.) But the ideas have to be lived with, experienced and internalised.

At the moment it feels as if playwrights are reacting to the journalistic noise around climate change. When the deeper ideas do emerge in plays, and these ideas inform the actions of the characters, the immediate subject of the play may not even be climate change.

RB

**17 February 2011**  
**what frankenstein and titania tell us about climate change**

The 11 February post might have mentioned that many themes that relate to climate change already exist in other plays. Joe Smith, senior lecturer in environment at the Open University, finds that the National's production of *Frankenstein* is more thought-provoking about climate change than *Greenland*:

There is a Romantic anti-industrialisation/anti-urbanisation strand which runs through environmentalism from Day One. But there are also strands in recent discourses of climate change 'solutions' that are in thrall to science and technology's apparent invincibility and adaptability. Hence the arch-modernists who were formed in the 'white heat of technology' environment of the 1950s and 60s are happy to contemplate immense geo-engineering experiments and massive expansion of nuclear power – Science discovered this problem and Science will solve it.

Susannah Clapp, the *Observer's* theatre critic, suggests *A Midsummer Night's Dream*. In Act II, Titania describes how, through 'this distemperature',

The seasons alter: the spring, the summer,  
 The childing autumn, angry winter, change  
 Their wonted liveries, and the mazed world,  
 By their increase, now knows not which is which.

RB

- Seven TippingPoint commissions announced:  
*As the World Tipped, My Last Car, In the Beginning was the End, A Beautiful Thing, Found Voices, Unplugged and A Funeral for Lost Species.*

**24 February 2011**  
**wanted: a portrait of the climate scientist as a real person**

In his preface to *The Coast of Utopia*, Tom Stoppard makes the point that writers can have real political influence. Turgenev's *Sportsman's Sketches*, Stoppard writes, 'were plausibly said to have done more than anything else to turn the "Reforming Tsar" Alexander II towards abolishing serfdom.'

But the writing has to be precise and observant. Discussing Alexander Herzen, Stoppard writes, 'What he detested above all was the conceit that theoretical future bliss justified actual present sacrifice.'

Twentieth-century history was on Herzen's side. It's easy to imagine, today, that many playwrights' resistance to climate change as a political subject comes from this idea that it deals with a 'theoretical future' and that it is being used to justify 'actual present sacrifice'. Playwrights like to write about real situations, flesh and blood characters, the here and now. And they like jokes.

In some ways, the most interesting characters to put on stage now are climate scientists: not a climate sceptic disguised as a climate scientist (as in *The Heretic*), but the climate scientists who are simultaneously appalled and fascinated by what they are discovering.

At last year's TippingPoint conference in Oxford, climate scientists spoke candidly and wittily about how their work had altered their lives and their world views. If caught accurately, that kind of portrait might have real political influence.

RB

**25 February 2011**

**would a play about climate scientists be the best way to write about climate science?**

The artist and theatre-maker Tim Nunn responds to the last post:

My trouble is not wanting to use climate scientists at all. Is it the same as writing about human rights by portraying a human rights activist? (That isn't a rhetorical question by the way.) Your last paragraph makes it sound as if the climate scientists would do a pretty good [job] themselves if they were given the chance – why should we represent that on stage? (Again, not a rhetorical question.) I've been torn about this for ages and not finding a way through.

True, there's no reason why a play about climate science need feature any climate scientists. A good play is about more than its immediate subject matter. For instance, David Hare's *The Permanent Way* is about the privatisation of the railways. But its real theme is grief.

That said, there have been important plays that are fairly directly about scientists. In *Science on Stage*, Kirsten Shepherd-Barr lists 'a wonderfully diverse' range of scientists who have (since Brecht's Galileo) peopled the stage: Niels Bohr, Werner Heisenberg, Ernest Rutherford, Marie Curie, Lise Meitner, Ralph Alpher, Sigmund Freud, Carl Jung, Rosalind Franklin, Thomas Huxley, Tycho Brahe, Johann Kepler, Stephen Hawking and Paul Dirac.

But Tim Nunn is quite right: a play about human rights does not have to feature a human rights activist.

RB

2011

**26 February 2011**

**why human rights activists are not like climate scientists**

In the last blog, the point was made that a play about human rights didn't have to feature a human rights activist. The analogy between human rights activists and climate scientists has prompted a couple of emails.

One email pointed to the difference in the way the professional and emotional lives interact:

I think climate scientists and human rights activists are completely different in terms of the potential tension between their emotional and professional lives, the material they are working with and how they are viewed publicly.

The other suggested that the kinds of knowledge that each work with and represent are fundamentally different:

Science is so embedded in knowledge about climate change, that it is a different kind of thing to human rights. So I'm not sure the comparison really holds up. Does this matter? Maybe not in a general kind of way – if what this means is that the 'specialist' or 'expert' is not the only person who can speak. But it does matter in a more specific way – that in thinking about climate change on stage, it might be a relief to get rid of the scientists, but one may still have to come to grips with science in much more complexity than just the 'facts' or 'predictions' or 'scepticism'.

RB

**2 March 2011**  
**comedy doesn't have to float free**

Nicholas Lezard suggests in the *Guardian* that Ian McEwan's novel *Solar* is hampered because you can't have a comedy about climate change.

It's curious that Lezard thinks comedy floats free of the world. Comedy, classically, is quotidian. It is all about the everyday, the bumbling, ridiculous, faltering, sometimes obscene manifestations of the everyday, ordinary world. It is classical tragedy that is freer of the ordinary world. That's not to say in the intervening centuries the comedic and the tragic haven't changed, intertwined and adapted to each other and new situations, as they might again now. Maybe it is that the dark laughs in *Solar* are out of place, an old type of comedy that can't grasp the situation.

WH

**8 June 2011**  
**spring moved at 1.3 miles an hour**

For a couple of years, this blog has been reporting on a remarkable project at the Paideia School in Atlanta, Georgia, which follows the arrival of daffodils along the east coast of the United States. The results for 2011 are now in.

The southernmost daffodil appeared in Jacksonville, Florida on 4 March, and the northernmost daffodil arrived in Fort Kent, Maine, on 27 April. The speed was 1,812 miles in 56 days, 32.4 miles per day, or about 1.3 miles an hour.

This is the 21st year of the daffodil project. The previous five years posted speeds of 12, 16, 20, 23.4, and 23.5 miles per day. It seems that a late-starting spring, such as was experienced in Boston this year, makes spring race up the coast to catch up. When a blooming daffodil was finally spotted in Boston, on 5 April, spring quickly followed with a sudden, intense flowery display, unrivalled for many years.

KG

# 2011

• 'Ten Climate Stories' exhibition opens at the Science Museum, London.

• Artsadmin holds the Two Degrees Festival: Art & Activism.

• A 'Greening Design' forum is hosted by the Society for British Theatre Designers and Rose Bruford College.

• Björk's *Biophilia* opens at the Manchester International Festival.

• A mock ecocide trial in the UK Supreme Court finds fictional corporate CEOs guilty of two counts of ecocide relating to the Canadian Tar Sands, and not guilty on one count relating to the Deepwater Horizon disaster.

# 2012

**2012** The biennial Arts Council England 'State of the Arts' conference includes, for the first time, two sessions on 'Artists and Our Future Environment'.

- *The Great Immensity*, a play about climate change by North American theatre company The Citizens, financed with a \$750,000 grant from the US National Science Foundation, opens in Kansas City.

- Chief executive Alan Davey announces that Arts Council England is the first arts funding body worldwide to embed environmental sustainability into its funding agreements for National Portfolio Organisations and Major Partner Museums.

- *Research in Drama Education* publishes a themed issue on 'Environmentalism', edited by Deirdre Heddon and Sally Mackey.

- *Readings in Performance and Ecology* published, edited by Theresa J. May and Wendy Arons.

- *Ten Billion* opens at the the Jerwood Theatre Upstairs, Royal Court Theatre, London, with scientist Stephen Emmott in collaboration with director Katie Mitchell.
- LIFT, the London International Festival of Theatre, hosts a panel discussion called 'Not Waving But Drowning. Has theatre risen to the challenge of climate change?'

# 2012

**21 May 2012**  
**talking about climate change**

One of the explanations offered for why climate change is not more prominent in people's thinking is that it's not physically seen. It doesn't feel 'real' enough.

But a different view comes out in the stories people tell about how climate change is immediately altering their everyday lives. The climate is changing how they feel about the world and their decisions about what to do.

Project ASPECT, based at University College Falmouth, is gathering stories about climate change from individuals and communities in Wales, northern England, London and Cornwall. Building a digital narrative archive, they are capturing on DVD how people talk about the climate in the context of their everyday lives.

There are those who watch. Heather continues the diary her mother started, recording every day what work is done on the family farm and the weather. Duncan and Matt are surfers in Cornwall, watching the storms. There are those who work with renewable energy, or, like Hanna, find green jobs for young people. Many are changing the way they grow food and eat: Mary from Incredible Edible; Owen with his backyard in Peckham; and masked night-time Ninja guerrilla gardeners. Singers, rappers, athletes tell their stories. Spontaneous acts of community kindness sit alongside the meticulous work of digitising the weather reports from world war one ships' logs.

In these stories of everyday life, there is a cultural reality emerging, soft-voiced, but pressing.

WH

• Records are broken for the lowest extent of Arctic sea ice.

• The Whanganui River in Aotearoa/New Zealand is the first river to be recognised as an entity in law.

• Volcano Theatre and the Centre for Alternative Technology, Wales present the Emergence Summit, on arts and sustainability.

• Creu Cymru, Julie's Bicycle, Cynnal Cymru and others join to green 42 Welsh theatres and institutes.

• *Performance Research* issue 'On Ecology' is edited by Stephen Bottoms, Aaron Franks and Paula Kramer.

**7 June 2012**  
**indie-theatre take on deepwater spill**

During April and May, script-in-hand readings by local actors of *The Way of Water*, Caridad Svich's play about the effects of the Deepwater Horizon oil spill, toured over 50 venues in North America and Brazil, Berlin, Aberystwyth, Glasgow and London.

The play, marking the two-year anniversary of the spill, travelled quickly, more like an indie-music event than a theatre tour. This new kind of theatrical experience is low-budget, international, tied in with social media and carbon-light.

The play deals with the toxic effects of the spill on four people, on their health, livelihoods and sense of community. The play's impetus is towards taking action against corporate malfeasance, a revision of the plotline of *An Enemy of the People*.

After the reading in Aberystwyth, Carl Lavery, Senior Lecturer in Drama, blogged 'Ten Thoughts on *The Way of Water*'. Here are three:

When I think of *The Way of Water*, I think of its linguistic rhythms and poetic beats – its politics of voice.

When I think of *The Way of Water*, I think of four young actors in Wales finding its meanings, walking its lines, tracing its shapes.

When I think of *The Way of Water*, I think of my Dad who died from a lifetime of exposure to the toxic fuel tanks of Phantom fighter jets.

WH

**14 June 2012**  
**the eden project and the overburden**

The partnership between the Eden Project and Rio Tinto has been billed as supporting education projects about sustainability and research into post-mining regeneration. This was to be a working partnership, not merely the means for Rio Tinto to obtain a 'social licence to operate'. The term was coined in the late 1990s by the Canadian mining executive Jim Cooney to refer to the relationship that mining companies develop with communities affected by mining projects to gain their acceptance. The 'social licence to operate' has come to refer also to the creation of a benevolent public image for corporations such as BP and Shell through their association with cultural institutions.

One of the education projects of the Eden Project/Rio Tinto partnership is a pop-up children's book, *Earthly Treasure*, full of pictures of dazzling jewels and brightly coloured pages showing how modern life can only exist through minerals that must be mined.

There's a page showing a huge open pit mine, a sombre, near-monochrome dug-out bowl. You can slide trucks to take away the 'surface layer' and 'pull down the tab and blast away the top layer of earth, called the overburden.'

The 'overburden'. The infinitely complex soil that makes life possible is merely a weight, a waste to remove to get to the riches below. The phrasing harks back to Francis Bacon, who wrote in his *Novum Organum* in 1620 that miners were the new class of man who would interrogate and alter nature. Nature could be 'forced out of her natural state and squeezed and moulded.'

The soil holds no more secrets. It's only the burdensome surface layer.

This normalizing of opencast mining and mountaintop removal is given to children as one more gem to absorb in their education. More than cultural benevolence lies behind the publication of *Earthly Treasure*: its phrasing condones licence – making free with the Earth – even as it seeks to obtain a social licence to operate.

WH

**26 November 2012**  
**a climate limerick**

Unable to pass up the opportunity to submit an 'Environmental Turkey of 2012' in the form of a limerick to the contest run by the Nicholas School of Environment at Duke University, I have chosen the epidemic of melting glaciers worldwide as my subject. The contest, open to American citizens, ends at midnight tonight. This is my offering:

As the global temperature warms  
Our planet reacts with fierce storms.  
The impact is felt  
When our glaciers melt  
And the coastline around us re-forms.

KG

2012

# 2012

- Edinburgh Festival Fringe hosts over 100 theatre, dance, physical theatre, spoken word, comedy and children's shows with ecological themes.
- *The Man Who Planted Trees* receives the Center for Sustainable Practice in the Arts award for sustainable production at the Edinburgh Fringe.

- Kieran Lynn receives the Nick Darke Award for environmental playwriting for his play *Wild Fish*.
- Hurricane Sandy travels across the Caribbean and eastern coast of the United States.

- *Guardian* theatre critics Michael Billington and Kate Abbott name *Ten Billion* as the best theatre production of 2012.

## 7 December 2012 'ten billion' from another side

The *Guardian* theatre critic Michael Billington, in his nomination of *Ten Billion* as the best theatre event of 2012, claims that all the people he knows who saw the production found it life-changing. From my unscientific poll of a dozen people who saw the production, including myself, it's possible we were in a different theatre. The lecture was well-crafted, the production tight, but the event was neither moving, informative or motivating. It was 'old news', a 'first-year introductory lecture', 'Al Gore without the cherry picker'.

Billington's lauding of the production is encouraging. That he, and others, were deeply affected is even more so, although one wonders what he has avoided reading or seeing for the past 20 years if the information presented was shocking. But Billington finds that it is not merely the accumulation of statistics, but the presence – the performance – of Stephen Emmott, the verifiable scientist, the speaker with a creditable reputation outside the theatre, that gave the production its urgency. For this audience, the fluid realm of belief and disbelief that makes theatre work had to break down for the shock of climate instability to be heard. At the same time, the theatrical occasion of sitting in that darkened room, listening to another human speak, heightened any effect.

Asking those who found the production lacking, I found each person had had at least one, if not many, moments outside the theatre when the numbers added up, when the terror hit, when someone trusted spoke about a future irreconcilable with what one could bear. These events can be motivating and if *Ten Billion* provided that for some, then theatre's role as educator has been met.

But if you've already had that experience, theatre is where you want to go to understand it, and a collocation of facts will not do that. This is a far more confused territory, requiring human imagination and many avenues of intelligence, deliberation, conflict and consent. It requires doing something like the processes of science, itself – its questioning and cross-questioning, experimentation, doubt and informed agreement.

Theatre may not be the place to present firm courses of action; Emmott's advice to get a gun falls especially short. Conventional forms of theatre may, or may not, be adequate to the combination of reality and fiction that understanding climate change demands. But theatre, or something like it, continues to be a place where, collectively, humans find a way through. There will continue to be many kinds of productions for many kinds of audiences. For the audience that gets the facts but wants more, the hunger for a theatre that reaches into that uncharted territory remains strong.

WH



# 2013

**2013** Reports show that carbon dioxide levels have passed 400 parts per million, considered to be an indicator that the amount of the gas in the air is higher than it has been for at least three million years.

- Artsadmin's Two Degrees Festival investigates climate, consumerism, community.
- In Balcombe, West Sussex, the local protest against Cuadrilla's exploratory drilling in advance of fracking is joined by No Dash for Gas: Reclaim the Power.
- Daniel Bye's *How to Occupy an Oil Rig* receives the 2013 Award for Sustainable Production at the Edinburgh Festival Fringe.
- The World Stage Design event in Cardiff includes 'People, Profit, Planet', a strand of talks and performance on sustainable design organised by the Center for Sustainable Practice in the Arts.

- The Fifth Assessment Report of the IPCC begins publication with the Working Group report on the Physical Science Basis, finding it 'unequivocal' that even if the world begins to moderate greenhouse gas emissions, warming is likely to cross the critical threshold of 2C by the end of this century.

# 2014

**2014** The IPCC report on impacts, adaptation and vulnerability concludes that the effects of climate change are already visible in melting sea ice, thawing permafrost in the Arctic, and dying coral reefs. Climate change is leading to heat waves, heavy rains and mega-disasters. These events pose a threat to global food stocks and human security, and no one will be unaffected.

• Nature's Revenge 2: The Revenge • Augury and Entropy • The Vanishing Point • EP\_Human Bin • Back on Track • Hot Air • H2h0pe: the Water Diviner's Tale • Air Traffic Controllers • Carrlands • Long Shore Drift • War Horse • Water • Crown Prince • The Sabbats • Invisible Bonfires • Feast on the Bridge • HALF LIFE • Another Kind of Silence • The Hunting Season • Remote Patrol • Meetings • Knowliddle • One, Nineteen • Rhinoceros • Field Sensing • ENCLOSURE • A Second to Midnight • EAT London • King's Wood Symphony • The Curse of the Grabbers • Conference of the Birds • A Need for Speed • Futurology: A Global Revue • BOUNDARY • Moj of the Antarctic: An African Odyssey • And While London Burns • The Man Who Planted Trees • Clare's Walk • Walking to Save Some Sea • The Legend of Slim McBride and the Lost Tribe • Faustus • Strawberry Fields • Cider with Roadies • Score for a Hole in the Ground • It Is Like It Ought To Be: A Pastoral • Transglobal duets • We Turned on the Light • Home of the Wriggler • White Open Spaces • No Plan B - the History of the World Backwards • In the Shadow of Trees • The Wolves in the Walls • EP\_Landfill • Promise on Earth • The Land • High Plateau • Longline: The Carnival Opera • Côt Myrddyn • Nebulous • The Storr: Unfolding Landscape • It Is For The Tiger • Botany Begins at Home • Early One Morning • Windy Old Weather • GEOGRAPH: Trace, Vanishing Point • Metamorphosis • Barebones • Sheepskin • Gulp! • Mulgrave • Corn Dollies • Weeping Ocean • The Giant's Foot • Caerdroia • Footprints in the Sky • The Man from the Council • Roots • The Saladinis • Stories on the Downs • Creek Tales • Freedom in The City • The Rubbish Monster • What on Earth!? • The Weather • You've Made a Meal of That • Elephant • Messenger • Bird Song • Camellia House • Last Blackbird • The Return • Monsoon Mela • One Rock • Of All The People In All The World • Rare Earth • Apple Pip • Feast Your Eyes • October Plenty • Chemical Mix • Hothouse • Heatwave • Silence of a Dale • Frog in Love • Visit • EARTH WATER SKY • Almost Human • Auntie Janet Saves the Planet • A Way of Life • Blooming Weed • Car-less Talk! • Taylor's Trailer and the Tractor Factor • Turning of the Tide • Beech • One Dark Night • The Price of Clouds • The Theft of Sita • Red Skies Over the Severn • Whose Land Is It Anyway? • Frankenstein • Keep Off the Path • Food for Thought, Wild-Life & Breathing Space • Convergence • Vessel • Hive & Aquifer • Breath • Wheelie Bins • You're Rubbish! • Tutu and the Sky Goddess • Yew Wood, Wouldn't You? • The Path • Ghost Nets 2 • Norah's Ark • Magic Sky • Magic Earth • On the Slate • Moon • Shrine, Outcrop & Channel • Don't Chill Out • Bringing the Rainforest into Your School • The Riot • Green Man • Water Water Everywhere • Talking Rubbish • One World • killing us softly/Desk Killer • Croissant Neuf Circus • Days of Plenty • The Cry of the Bittern • HEVVA ! • Noah's Park • Saving Energy • She Thinks She's a Fish • Threshing About • Walkabout • Bottle Busters • Bringing in the May • Transmutation, Beacon, Flux & Dark Matter • The Barbers of Surreal • Sharp Seedlings • In the Same Breath • Beauty and the Breast • The Secret Sign • The Selfish Shellfish • A Geological Cookery Class • Green Roadshow • Leech! • Butterfly Rover • Alum Halus & Water Crossing • The Podfather • Dance to My Tune • Epitaph for the Whales • Broccoli and Sprouts Clown Show • Végétal • The Man With Green Hair • Following the Stars • Diary of a Crisp Packet • The Birch and the Pine and Phil • I Am

a Road • A Rock Cake Cookery Class • Harvest of Ghosts • Carpel and Stamen • Maniesto de la Selva • Hope Deferred • The Women Who Threw the Day Away • 90% CRUDE/Unravelling the Carbon Web • The Field • Watermark • Robin Hood and the Sherwood Experience • Greening the Mountain • Fields • Fossil Woman • Meeting Ground • Ghost Nets • Menace of the Mud Monster • The Road • An Elephant Called Slowly • Dex Dipper and Wyrld Walks • The Shorewatchers' House • Three Tides Turning • The Pine and the Eagle • Wild Works! • Sonia the Baby Seal • The Last Rainforest • Return of the Copper Flyer • Warped • Windows • Out of the Skip • Court in the Woods • Leaves among Thorns • Eric the Eaglet from Outer Space • A Load of Old Rubbish • Beneath the Waves • DELTA • MERTON ISLAND • HOMELAND • Danger My Ally • Forest for Our Children • The Dream • A Scottish Reservation • The Factory • Angels in America • The Wilderness • STILL WATERS • Rhino • Lost Forest of Caledon • Sinking Ark • Sweet Fancy • Transport Wars • Arctic Heart • The Bees • The Weatherhouse • A Day Out at Partick Beach • Sorted • The Salmon • Just Right • Singing in the Rainforest • Wild Walks! • TREE OF LIFE, CITY OF LIFE • Water of Life • A Serious Leak • Whale – The Story of Putu, Siku and K'nik • Le Veterinaire Extraordinaire or "The EEC meats its match" • Vermin! • A Word about Waves • Beltane Fire Festival • The Cressida Folly • Wyoming • The Green Woman • The Swallows • Salt and Slack Water • Psyche! Open the Box! • A Second Soaking • Out with the Ark • Natural Causes • Operation KBT • The Energized Guyz • Origin of the Species • The Reapers Year • The Hedge • The Sea Saw Red II • A Drop in the Ocean • Seol • The Brontosaurus Show • The Patience of Fossils • Carnival/Carnival of the Animals • When the Boats Came In • The Trumpet Rat and Other Natural Curiosities • Small Heads (Don't Wear Big Hats)! • The Badgers • The Homemade Circus • The Clone Show • Power Mad • Landmarks • Journey of the Treeman • On An Uncertain Insect • The Cranium Show • The Freeway • Experiments • Savages • Drink the Mercury • Not Not Not Not Not Enough Oxygen • The Royal Hunt of the Sun • Moby Dick Rehearsed • The Cheviot, The Stag and the Black, Black Oil • An Enemy of the People...

**At the heart of the Ashden Directory is the work of thousands of artists creating theatre and performances with ecological themes. To give their productions a presence in this volume, we list some titles here.**



A whistle-blower on a town's polluted water becomes an enemy of the people. A jazz clarinetist makes music with a laughing thrush. An opera exposes carbon's web of power and investment. A theatre covers its walls with growing grass.

From 2000 – 2014, the online Ashden Directory supported the emerging field of performance and ecology through its directory of productions, a timeline, news, interviews and essays. Ashdenizen, the companion blog, added commentary on how the performing arts and wider culture relate to climate change. This selection of writings and photographs from the two sites, together with three new essays, traces how performance engages with a changing environment.

Cover image: *As the World Tipped*, a Wired Aerial Theatre production, written and directed by Nigel Jamieson, produced by XTRAX. Photograph by Kevin Ryan.