



## Open Research Online

---

The Open University's repository of research publications and other research outputs

### Interdependence

#### Journal Article

How to cite:

Smith, Joe; Clark, Nigel and Yusoff, Kathryn (2007). Interdependence. *Geography Compass*, 2 pp. 340–359.

For guidance on citations see [FAQs](#).

© [\[not recorded\]](#)

Version: [\[not recorded\]](#)

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.1111/j.1749-8198.2007.00015.x>

<http://www.blackwell-compass.com/subject/geography/>

---

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's [data policy](#) on reuse of materials please consult the [policies page](#).

---

## **Interdependence**

Joe Smith, Nigel Clark, Kathryn Yusoff

Geography Discipline, The Open University, Milton Keynes, MK7 6AA

Tel: 01908 274066

[J.H.Smith@open.ac.uk](mailto:J.H.Smith@open.ac.uk), [N.H.Clark@open.ac.uk](mailto:N.H.Clark@open.ac.uk), [K.Yusoff@open.ac.uk](mailto:K.Yusoff@open.ac.uk)

### **Abstract**

How should we respond to the increasingly dense bundle of economic, cultural and ecological interconnections that span the globe and stretch into the future? What kinds of ethical and public engagements are demanded of researchers who work on global environmental, economic and social issues? The term interdependence may provide a powerful framework for advancing thinking and debate both within academia and amongst wider publics in relation to these questions. Members of the Open University's Geography Department have been working with partners to build the Interdependence Day project. The project combines research, cultural work, communications and public participation in an attempt to make sense of our responsibilities to people distant in space and time, and to the non-human natural world. This paper reviews nearly a century of deployments of the term interdependence in political and academic writing, introduces the distinctive work that might be done with the term in the critical social sciences and outlines the Interdependence Day project.

**Key words (5)**

Environment and Society; Globalization; Public participation; Sustainability; Contemporary

**Biographies**

Joe Smith is a senior lecturer in environment at the geography department at The Open University. He is author of *What do Greens Believe* (Granta, 2006), *Climate Change: From Science to Sustainability* (with Stephen Peake, Open University Press, 2003) and *The Daily Globe: Environmental Change, the Public and the Media* (Earthscan, 2000). Two current research projects explore the politics of consumption, and the media's role in shaping public debate about complex issues. Since 1996 he has run seminars on environmental change issues for media decision makers and since 2000 has acted as academic consultant on a number of BBC projects including BBC1 programmes for the 2006 climate change season. Joe is initiator and chair of the *Interdependence Day* project. [j.h.smith@open.ac.uk](mailto:j.h.smith@open.ac.uk)

Nigel Clark is a senior lecturer in human geography at the Open University. He is the editor of *Environmental Changes: Global Challenges* (with Mark Brandon) and *A World In the Making* (with Doreen Massey and Philip Sarre). His published work includes research on bioinvasion, domestication and wildness, natural disasters, and ecological cosmopolitanism and citizenship. Nigel is currently

writing a book that explores the ethical and political implications of being a small, soft, vulnerable creature living on a lively and volatile planet.

n.h.clark@open.ac.uk

Kathryn Yusoff is a Post Doctoral Fellow at the Open University. Her research interests are centred on re-thinking visual culture in relation to extreme environments and emerging technologies of vision. She recently completed her Ph.D, Arresting Visions: A Geographical Theory of Antarctic Light at Royal Holloway, University of London (2004). Currently, she is working on Ice Archives, an archive and field-based project that seeks to question the narratives, materialities and images of climate change. She can be contacted at: Geography Discipline, Faculty of Social Sciences Faculty, Open University, Walton Hall, Milton Keynes, MK7 6AA, UK; email: [k.yusoff@open.ac.uk](mailto:k.yusoff@open.ac.uk)

## **Introduction**

Figure 1

"Today we all gather here to declare our interdependence. Today we hold this truth to be self-evident: we are all in this together." With these words, delivered at the opening of the US leg of Live 8 on July 2<sup>nd</sup> 2005, entertainer and acting emcee Will Smith caught the spirit of the benefit concerts that were held in ten different countries and broadcast worldwide. Live 8 was intended to raise

awareness about global social injustice, and more specifically to put pressure on the world leaders due to gather the following week for the G8 summit in Scotland to cancel debt, increase aid and institute fairer trade rules for the world's poorer nations. To what degree Live 8 achieved these aims remains debatable, but Smith's declaration of interdependence provided one of the event's most memorable moments, and gave a massive boost of publicity to a catch phrase that has been enjoying increasing attention in recent years.

The term 'interdependence' conveys a sense of relying upon and being responsible for others. It has been deployed in a number of ways and done both academic and political work through the course of the last century, which is reviewed in the opening section. Though it may be a reference point in many contexts and fields, we are applying the term in relation to the multifaceted experience of globalization, and in particular to the widespread acceptance of human-caused global environmental changes.

Such issues seem to stretch and vex existing notions of whom and what we might take responsibility for. The second section considers how such obligations cross between near and far, or the local and the global. They also point to the ways that past, present and future, and the human and non-human, are bound up together in tangled responses and responsibilities. While threats or problems may well be multiplying, it is also the case that novel opportunities for affirmative engagement with such issues are also opening up.

In a largely academic context, notions of global interrelatedness and attendant issues of responsibility are currently being explored in numerous ways, under a number of umbrellas: including cosmopolitanism (Held 2003) and new takes on citizenship which encompass ecological issues and other trans-national concerns (Dobson, 2003). While we wish to draw on these and other discourses, we propose that interdependence has the advantage of an already broad circulation, and a more intuitive appeal beyond academia. However, we do suggest that the term would benefit from more sustained critical attention. In particular we want to bring interdependence into proximity with explorations of 'relationality' that have been a staple of much recent human geography. We are interested in the way that ties and obligations emerge, how they come to be recognised and made visible, and how they can be further developed in novel forms of association and collective action.

The final section offers an account of Interdependence Day: a project that seeks to integrate interdisciplinary academic investigation, experimental partnerships and public engagements in order to generate fresh answers to the question of how we should respond to social and ecological interconnections that span the globe and stretch into the future.

Figure 2

### **Interdependence: a concept with a history**

The term 'interdependence' serves as powerful shorthand at a time when global environmental change and globalization are demanding drastic revisions of many of our well-established institutional and conceptual frameworks. But it would be a mistake to claim any novelty in drawing upon it. It is a promiscuous phrase, and through the course of the last century has been pressed into service by conservatives and radicals, populists and academics alike. Although we have already suggested that certain pressing issues are prompting a re-imagining of responsibility at an integrated global scale, the emergence of globality as the arena of ethical and political concern should not be taken as a logical or inevitable step. For interdependence-writ-global to appear self-evident has taken considerable work. It might best be viewed as the contingent outcome of a number of different developments with specific historical origins and trajectories.

In the early 20th Century the scientific-ecological strands in this thinking were inseparable from philosophical and sociological intentions. Donald Worster's history of ecological thought points to Alfred North Whitehead's influence in the development of organicist and holist thought. Whitehead held that 'the various parts of nature are so closely interdependent, so densely woven into a single web of being, that none may be abstracted without altering its own identity and that of the whole' (Worster 1977, 317). This insight asked questions of science practice, but Whitehead's greater purpose was to indicate a direction for society. The urban historian and planning theorist Lewis Mumford followed this argument,

and drew on the ecological botany that had inspired his teacher Patrick Geddes in shaping his 'organic ideology' of the 1920s. His theorising was aimed at a restoration of communal values to America. The US naturalist Walter Taylor offered support for this line of thinking with his observation that 'there is little rugged individualism in nature' (quoted in Worster 1977, 320).<sup>1</sup>

### Figure 3

These organicists were seeking ways of thinking of human-natural relations beyond a narrow economic nexus, and of identifying co-operation and progress both in and between the human and natural worlds. However, an incipient determinism underpins this approach. There is a conviction that the tide will flow their way: once the scientific fact of interdependence is accepted people will have a life-revering ethic awakened within them. This is reflected in the extraordinary assertion by Ralph Gerard, one of the Chicago organicists, less than a year after the first atomic bombs were dropped on Hiroshima and Nagasaki, that 'forces are apparent that are guiding us towards an interdependent world unity' (quoted in Worster 1977, 329).

There were continuities and connections with this ecological organicism in the sporadic use of the term interdependence in political discourses in the first half of

---

<sup>1</sup> Close parallels to this holist and organicist vision were being developed at the same time by Soviet ecologist Vladimir Vernadsky (Oldfield and Shaw, 2005). Such work had similar consequences in terms of a freighting of concepts from biological to sociological realms of inquiry (Jehlicka and Smith, forthcoming).

the twentieth century, most notably in its deployment by US Secretary of Agriculture Henry Wallace. Wallace viewed the various sectors of the agricultural system as 'great links in the food distributing chain', and proposed that his Farm Act of 1933 be understood as a 'Declaration of Interdependence, a recognition of our essential unity and of our absolute reliance one upon another' (1944, 1<sup>st</sup> 1933, p.43). This rhetoric in turn inspired Walter Taylor's more explicitly ecological declaration of interdependence (Taylor 1936, 335).

In similar vein philosopher Will Durant drew organicist tropes into political rhetoric in a project he initiated targeted at racial intolerance. Durant's argument was that 'no democracy can long endure without recognizing and encouraging the interdependence of the racial and religious groups composing it' (in Weyler, undated). As it turns out, Will Smith's 2005 Live8 performance was not the first Hollywood-blessed Declaration of Interdependence: the LA Times records the principal speakers at the inaugural dinner as including Bette Davis and German novelist Thomas Mann (March 23, 1945).

It is in the post war period that a much more systematic and encompassing notion of global interdependence takes shape. In the 1950s and 60s we can discern a growing interest in the earth as a single integrated system with its own global-scaled dynamics. In the earth sciences this finds its expression in the first International Geophysical Year (IGY) of 1957/58, a scientific collaboration involving over 5000 researchers from 61 countries (Dodds, 2006). Exploration of

the ocean floor under the auspices of IGY paved the way for the theory of plate tectonics – the first fully global theory in the history of the earth sciences. At the same time, integrated studies of land, sea, air and ice gave new insights into the dynamics of global climate, as well as prompting early concern about human-induced global climate change. The IGY also looked at the earth from the perspective of the solar system, catalysing the scientific exploration of space. Amongst other new forms of data about our planet, the probing of ‘near space’ was shortly to provide the iconic photographic images of the ‘whole earth’.

James Lovelock and Lynn Margulis’ Gaia theory offered a filled-out picture of interdependent ecological thinking for the 1980s. The theory expanded ecological frames of thinking rooted in habitat or species studies to the planetary scale, with geology doing as much work as biology in generating the conditions for a life-filled planet (Lovelock, 1979). In the last two decades of the twentieth century biodiversity science and above all climate science - building on the insights of IGY - ensured that thinking of environment-human relations in terms of global interdependence entered the mainstream.

#### Figure 4

Although the geopolitical implications of thinking about the earth as an integrated *physical* system can be discerned in discourses circulating around ‘earth system’ science from at least the time of the first IGY, concerted and systematic thinking

about the dynamics of global *social* processes in the post-war period has its own distinctive genesis. While the emergence of fully globally-focussed social thought is complex and multifaceted, we would afford a pivotal role to a range of theories that emerged in response to the intensifying economic interrelationship between the global 'North' and 'South': what geographer Stuart Corbridge refers to collectively as 'interdependency thinking' (1986, 217).

With dramatic increases in world trade in the post-war years, it became apparent to many observers that the gap between the more developed North and the less developed South was not being closed. From the 1950s onwards this prompted theoretical and policy initiatives that sought to understand and engage with the emerging economic 'world system'- ranging from liberal interventionist approaches to Marxist critiques of underdevelopment (Forbes, 1990; Corbridge 1986). Though it was anticipated by earlier theories of imperialism, never before had there been such widespread and sustained attention to the dynamics of a globally interconnected social world. Especially for the more radical theorists, these were far from simply economic theories, As Corbridge puts it, accounts of 'dependent interdependency' 'present a model of the global system in which the North is perpetually exploiting the South through a series of unequal and asymmetrical relations of production and exchange' (1986: 201). This was, and remains a moral as much as an economic critique, and as such it does the groundwork for more recent campaigns against global social injustice, including struggles for fair trade, debt reduction and better conditions in 'sweatshops'.

In the academic realm post-war engagements with global social dynamics of interdependency were inherited and further developed in the international relations literature. International relations theorists considered the concept as a possible response to realism's failure to provide a comprehensive view on 'today's multidimensional economic, social and ecological interdependence' (Keohane and Nye, 1977). Intense disagreement over the conceptualisation and utility of interdependence continued through the 1970s and into the 1980s (Baldwin, chapter 8, 1980). For Rosenau the concept indicated four characteristics: complexity, the involvement of non-governmental actors, fragmented decision-making and the necessity of multilateral decision-making in coping with emerging global issues (1980). By the late 1980s, with the extraordinary events that saw the end of the Soviet Union and the Cold War, the term had given way to a number of reframings of international relations, economics and politics – above all those centred on the term globalization. Interdependence, however, recently enjoyed a reprise in a popular commentary on geopolitics and economics that promoted the assertion of a social democratic European alternative to US dominated neo-liberalism (Hutton, 2003).

Needless to say, this is far from an inclusive survey of the strands that have contributed to the emergence of a sense of 'interdependent' globality. In the process of drawing out the theme of an emergent concern with the global dynamics of both physical and social processes we have bypassed some

significant invocations of interdependence. But it is important not to shy away from an obvious and sometimes perturbing attribute of the catch-phrase: its flexibility and refusal to be captured by any specific political ideology. We should recall that US Republican Henry Kissinger made interdependence a central concept of his speech to the UN special session in early 1974 in response to the oil crisis. More recently the phrase has surfaced in Civworld's Interdependence Days organised in the wake of September 11th 2001 (Civworld 2006), as well as in speeches and statements by mainstream politicians in the UK and US, including British government ministers and opposition spokespeople (Benn 2006; Fox, 2006; Miliband 2006) and former US President Clinton, who argues that 'interdependence is both the great promise and the defining paradox of the 21st century' (2003).

#### Figure 5

There is a real risk, therefore, that the concept of interdependence is diffuse enough to be invoked for almost any conceivable purpose, a fate which some would see having befallen the 'whole earth' image. That being said, we remain committed to further development and exploration of interdependence in response to the demands of a historically specific juncture. What we believe is of great importance in the present is the accelerating convergence of previously relatively distinct concerns that is: global *social* dynamics and intrinsically global *physical* dynamics. These two dimensions of the Earth as a single integrated

system are being drawn together by the growing awareness that it is no longer possible to think about global social processes without also considering pressing global ecological issues - most notably climate change and biodiversity loss. The coincidence of economic and cultural globalization with the maturing of global environmental change science is carrying a whole body of academic, political and media practitioners into new and unfamiliar terrain where it is necessary to grapple simultaneously with the dynamics of the earth's atmosphere, hydrosphere, lithosphere, cryosphere and biosphere (air, water, rock, ice and life) and with ongoing transformations in a globalising economy and cultural system.

#### Figure 6

In hitching the concept of interdependence to the task of exploring and articulating the forms of responsibility that attend this moment, we concede that there are further risks. As we noted above in the case of early twentieth century appeals to organicism, attempts to weave different forces and processes together, coupled with the claim that 'we are all in it together' can serve to foster a kind of determinism. We feel it is important not to assume that revelations of interconnectivity provide blueprints for belief or behaviour, and consider it vital not to preclude room for contestation, negotiation or more playful interpretations. To reclaim and build on the notion of interdependence, we would argue, requires more nuanced accounts of our relationships with diverse 'others', and the circumstances under which feelings of responsibility or obligations emerge. It is

in this regard that the recent concern of human geographers with the ethical and political implications of 'thinking space relationally' (Massey 2004) has much to offer.

### **Re-imagining Responsibility**

#### Figure 7

One of the ways that geographers explore relationality is not simply by making assertions or pronouncements, but by actually tracking the practices through which geographically extensive linkages are established and sustained. Following flows through specific networks and nodes, researchers 'flesh out' the causal chains that implicate distant lives. As Chris Philo notes: 'interconnected geographies (and histories)... create vulnerability for certain peoples and places rather than others' (2005, 442). Bringing these connections to light, he continues, enables us to apportion responsibility and culpability. In this regard, critical geographers make common cause with the strategies of many activist organisations and policy-makers who likewise address problems in which distant and diverse lives are materially entwined. Calculating ecological debt (Simms, 2006), measuring ecological footprints (Rees and Wackernagel, 1996; WWF International, 2006), mapping consumption (World Consumption Cartogram, 2005) and plotting routes to contraction and convergence of global carbon emissions (Global Commons Institute, undated) are all strategies for teasing out

the uneven distribution of responsibility for global environmental changes. So too are new forms of monitoring the spatially distributed social and ecological consequences of consumption choices, such as Fairtrade marketing and sustainable product initiatives.

Whether activist or academic, these are all ways of encouraging those who are implicated in a problem to be more accountable for the effects of their actions. But is it enough to identify the connections that link 'our' lives to the lives of distant 'others'? In this sense, we should take note of another attempt to provide an overarching framework for global interconnectivity: the concept of sustainability (or sustainable development). Over the last twenty years, the discourse of sustainability has promoted an understanding of ecological relations as a guide to practical strategies for living within the tolerance levels of these systems. But despite numerous efforts to pinpoint excessive patterns of resource use - often accompanied by dire warnings of the perils of failing to act, the idea of sustainability has generally failed to capture the public imagination or entrench itself in contemporary culture.

We believe that one reason for this may be that identifying causal chains of influence does not necessarily provide a motivating force to accept or enact practical obligations (Barnett and Land, 2006 forthcoming). Such strategies tend to rest on assumptions that ethical or politically progressive behaviour is best encouraged by a rational and calculative disposition: which is especially ironic in

the case of sustainability, given the counter-cultural roots of much contemporary environmental activism (Smith 2006). In this regard, it is noteworthy that geographers and other critical thinkers who have been exploring the ramifications of thinking 'relationally' have also thought to couch responsibility in less apportioning and retribitional ways. They have encouraged us to think about interdependence and its responsibilities not only in terms in what we have done, but also in terms of who we are: an approach which does not assume a pre-given identity for those who are involved.

So rather than just thinking about an 'I' over here who impacts on a 'you' over there, relational thought prompts us to think more deeply about how these 'entities' became what they are – and how they are still 'becoming' (see Massey, 2004). Acknowledging that every individual, every place, every community has come about through relations of give and take with other individuals or places or communities points towards a degree of interdependence that in many ways defies measurement. It suggests that every 'one' – every individual - contains traces of a great many 'others'. And that who and what we are is the sum of all these traces – thus conveying a sense of indebtedness that is so deep and pervasive that all our accounts could never be calculated, let alone settled (Diprose, 2002). This certainly does not invalidate the kind of accounting that notions of justice and equality demand – but it does imply that our reliance upon others will inevitably exceed such measures.

This might become clearer if we work through some examples. Currently, international negotiations over human-induced climate change seek to determine which countries are contributing, or have in the past contributed 'more than their fair share' of carbon to the atmosphere. However complex the equations may be, many would argue that these calculations are absolutely necessary if future restrictions on carbon emissions are not to be unfairly borne by people and places which have not experienced the advantages of fossil-fuelled economic growth enjoyed by others. Those of us in wealthy industrialised countries, it has been further argued, owe an 'ecological debt' to those in poorer less-industrialised countries on account of the damaging contributions we have already made to the composition of the earth's atmosphere (Simms, 2005).

But what kind of compensation would ever be adequate for the loss of a homeland, or for an extreme weather event that devastated a community? These are some of the ways in which global responsibility might be seen to exceed the scope of calculation and accountability (as those who make the case for ecological debt and other 'settling of accounts' know only too well). There are other ways, however. Research into climate change is uncovering evidence which points to the fact that global climate has not only shifted dramatically, but often abruptly many times in the past, long before there was any discernible human impact. At various times, our distant ancestors must have experienced such sudden and catastrophic climatic changes, which were undoubtedly demanding and traumatic to live through. So there is a sense in which 'we' today

- all of humankind, wherever we live - owe our very existence to the capacity of our predecessors to endure extreme and catastrophic conditions. This is another form of indebtedness to 'distant others', though it is a kind that clearly resists calculation or repayment.

Of course, extreme or disastrous events do not just belong in the past. We are all, to varying degrees, vulnerable to unpredictable events, whether these events have their triggers in the physical or the social world. The Indian Ocean Tsunami of December 2004 was a reminder of this, and though the loss and suffering it caused was conditioned by social as well as physical factors there are important senses in which a tragedy of this nature exceeds the kind of tracking of connections that seek to establish liability. The massive outpouring of sympathy and assistance for tsunami victims from around the world draws our attention to another kind of responsibility, one that is taken on not through any sense of culpability or causal implication but as a response to the needs of others (Clark 2005). The capacity of ordinary people to be moved to respond to events affecting other people they have never met before, including 'strangers' who live far away, reminds us that care or compassion does not necessarily begin or end with those who are closest to us (Massey, 2004). More than this, it seems to be saying that guilt or liability is not the only spur to action. And perhaps that it may not be the strongest motivating force that activists or policy-makers and implementers have to work with.

As Clive Barnett has noted, the struggle for new and fairer relationships with others should not overlook the importance of 'ordinary modes of relating already crossed by... virtues such as generosity, responsibility, sympathy or compassion' (2004, 510). Should we really need extraordinary events like the tsunami to remind us that ordinary people, in everyday life, actually spend much of their time helping, looking after and loving others? Or to remind us that many of those who share concerns and care and love were once 'strangers' who had first to be let into each other's lives before enduring bonds could develop?

In this regard, one of the contributions that recent thinking about the ethics and politics of relationality might bring to the idea of interdependence is a greater attention to the not-at-all extraordinary ways in which people are attentive to each other's needs (including the needs of others who are not 'people' – who are other-than-human). This also means attending to the ways in which these ties or obligations first emerge. So rather than conceiving of interdependence simply as a given pre-existing condition we need also to concern ourselves with the processes or events whereby new connections and forms of obligation come into existence: moments in which we first encounter someone or something in need, and feel drawn to respond rather than to turn away. The Indian Ocean Tsunami was one such momentous occasion, but smaller and no less significant responses are happening all around us all the time. And indeed, many campaigns for social change seek to widen participation in their movements precisely by triggering a moment in which we are 'touched' by the plight of

others, usually by way of images or text or some other form of mediation (Rose, 2006).

## Figure 8

This raises a number of important questions: questions with no easy answers. In cases where people have been moved by the plight of others how can we open up, and keep open, pathways for sustained responsiveness? How can we construct the kinds of institutions or political processes through which existing capacities for compassion, responsibility and care might be activated in practical, transformative ways?

### **The Interdependence Day Project**

We want to conclude not with a new Declaration of Interdependence, but with the outline of a project. Many of the previous intellectual and political projects that have worked with the term interdependence over the last century have set out with clearly established goals; whether to widen popular commitment to a specific political principal, or to establish a particular way of representing the world. Our own work with the term, centred on the Interdependence Day project, is looser and more experimental, and aims as much at constituting a public as it does convincing a pre-existing one. Interdependence Day (ID) intends to open up some thinking space and initiate novel dialogues. Keeping in mind the focus on converging planetary dynamics we outlined above, we wish to play on the

etymology of the term interdependence. At its heart is the Latin *pendere*, to swing, which we take to be suggestive of the ever-present potential for rapid changes of state that characterises complex systems. In the context of global environmental change (but also of precipitously intertwined global economic and financial systems) this prompts us to explore ways of equipping ourselves - both practically and imaginatively - for unpredictable and potentially sudden changes of state.

#### Figure 9

But rather than simply going with the flow, we also want to ask how the world could be 'put together' differently, and how we might take advantage of the opportunities that exist for action in an era of intensifying interconnections and rapid change. In contrast with both environment and development NGO discourses that tend to be heavily dependent on references to limits, restrictions and threats to security, the term is open to a positive, creative reading. It allows for exhilaration at the moment we live in. We propose that the revelation of our own power to act in an interconnected world is as easily available as the more familiar feelings of disempowerment, and that we can uncover this fact in our research, teaching and public engagements.

The research components of the project comprise a series of activities that academics can immediately feel comfortable with, comprising seminars

publications and teaching work. But in each of these cases we have sought to test some new ways of working. The series of ESRC/NERC funded interdisciplinary *Interdependence* seminars have seen physical and human geographers, journalists and policy people travel around in small group workshops at the British Antarctic Survey where they have, in turn, visited ice-core stores, explored different ways of mapping Antarctica and engaged with a range of cultural representations of environmental change in the Arctic regions. Working not just with topics that demand interdisciplinary approaches, but actually handling materials created conditions conducive to 'talking across the divide' between the natural and social sciences (Harrison et al 2004). This first seminar in the series confirmed the importance of investing time in 'the development of shared vocabularies and understandings' (Bracken and Oughton, 2006) in interdisciplinary working. The first postgraduate workshop in the series (held on the morning of the Interdependence Day public event) picked up on questions of temporality that had been persistent in the first meeting. The progress of the seminar series, which will run until Autumn 2007, can be followed at the project website (Interdependence Day, 2006).

Although it is early in the project to be considering the programme or character of publications we have written pieces for a range of contexts in order to disseminate the work and invite reaction to the direction we are taking. In particular we have sought to engage publics beyond academia to respond to this work. Four months in advance of the first public event the new economics

foundation and The Open University's Geography Discipline collaborated on the Interdependence Report (Simms, Moran and Chowla, 2006)

[http://www.neweconomics.org/gen/z\\_sys\\_PublicationDetail.aspx?pid=220](http://www.neweconomics.org/gen/z_sys_PublicationDetail.aspx?pid=220) . The report drew on the ecological footprinting literature but took the innovative step of identifying the date in the calendar when, in 2006, the UK oversteps its ecological limits. This eye-catching means of demonstrating how dependent the UK is on the rest of the world (in economic, social and cultural as well as ecological terms) gained widespread print and broadcast news media attention and helped get the term in policy circulation. A broadsheet style publication of short essays by Open University geographers that speak to the theme was published in time for the first ID public event (open2.net, 2006)

<http://www.open2.net/interdependenceday/declaration.html>. The material was based on completed research or work-in-progress and a project website includes relevant longer working papers and other related material. This includes a short film catalysed by the first seminar (Tyszczuk and Guy Greaves, 2006), a collaboratively written Renga poem produced in the course of the first ID event, footage of the Dirt Café collective's installation and discussion of the politics of food, Benedict Phillips' Ghosts in the Machine installation that provoked thinking about fossil fuels and extinction, the arts group Proboscis 'Dialogue on the Cultures of Listening' and puppeteers Blind Summit Theatre's own exploration of relations of response and responsibility between puppets and puppeteers. These works can be seen or linked to at [open2.net \(2006\) or the Interdependence Day](#)

[project website \(2006\)](#) . The ID project has also begun to shape teaching projects, and to reshape advocacy work.

Feedback suggests that the mix of interactive workshops, arts and performance, exhibits and talks proved to be a powerful way of provoking fresh responses to considering globalization and environmental change – and considering them in tandem. In addition to the multimedia materials that offer samples of the day's programme the BBC Radio 4 Material World broadcast from the event can be reached at

[http://www.bbc.co.uk/radio4/science/thematerialworld\\_20060706.shtml](http://www.bbc.co.uk/radio4/science/thematerialworld_20060706.shtml) .

Figure 10

A second Interdependence Day is planned for October 2007 that will build on our learning from the first, and be nourished by the maturing programme of research.

## **Conclusion**

The Interdependence Day project arose out of a conviction that debates and communications around global environmental change and the downsides of economic globalization are often framed in ways that impede rather than catalyse creative responses. It was intended from the first instance to be a means of exploring fresh, perhaps unexpected, ways of engaging publics and policy worlds in thinking about the questions summarised by the term sustainable development

– a phrase that has consistently failed to win meaningful public or political response.

To this end the inaugural Interdependence Day public event sought a tone that turned away from a disempowering litany of impending disaster and instead represented an invitation to experiment and to participate in ‘making new maps for an island planet’. Our work with the term is not so bold as to want to supplant ‘sustainability’ or ‘sustainable development’: these terms are well-rooted and in particular spheres they are doing valuable work. Rather we want to explore the current state of global interdependence with an air of experiment and creativity in coming years. In this way we want to take part in the politics of change rather than simply commentate on it. The project has been conceived with the assumption that critical social scientists *can* engage directly in urgent questions, or, in Paul Cloke’s words, ‘think as an actor, and not just think about action’ (2002, 602).

A sign at the headquarters of the countercultural bible the Whole Earth Catalog invited its editors to ‘Dig Wholes’ (Kenner, 1971, 7). Although we don’t believe that invoking holism, or simply stating the fact of intensifying interconnectedness in the world is sufficient to deliver appropriate responses there is something of the energy and optimism of that era that fits with the work we want to achieve with the Interdependence Day project. The bundling together of academic research activity, webcasts, broadcasts, public events and policy interventions is

not accidental. We intend that they will inform and energise each other. At the core of the work is a conviction that practical, positive change, rooted in new ways of thinking about our relations and responsibilities, is possible in an interdependent world.

## References:

- Baldwin, D.A. (1980). *Paradoxes of Power*. New York: Basil Blackwell
- Barnett, C (2004) Deconstructing radical democracy: articulation, representation, and being-with-others. *Political Geography* 23, pp.505-528.
- Barnett, C., and Land, D. (2006 forthcoming). Geographies of generosity: Beyond the moral turn. *Geoforum*.
- Benn, H. (2006). Speech on climate change. *The Guardian*. 24 February.  
[Online]. Retrieved on 30 October 2006 from:  
<http://politics.guardian.co.uk/development/story/0,,1717128,00.html>
- Bracken (née Bull), L. J. and Oughton, E. A. (2006). 'What do you mean?' The importance of language in developing interdisciplinary research. *Transactions of the Institute of British Geographers*. 31 (3), pp.371-382.
- Civworld (2006) *Interdependence Day website* [Online]. Retrieved on 30 October 2006 from: <http://www.civworld.org/>
- Clark, N. (2005). Disaster and Generosity. *The Geographical Journal: The Indian Ocean Tsunami: Geographical Commentaries One Year On*. 171 (4) pp.384-6.
- Clinton, Bill (2006) *Section on global interdependence, in China AIDS summit speech, November 10, 2003* [Online]. Retrieved on 30 October 2006 from:  
<http://www.clintonfoundation.org/111003-nr-cf-hs-ai-chn-fe-china-aids-summit2.htm>
- Cloke, P. (2002). Deliver us from evil? Prospects for living ethically and acting politically in human geography. *Progress in Human Geography* 26 (5), pp.587-604.

Corbridge, S. (1986). *Capitalist World Development: A critique of radical development geography*. Houndmills, Basingstoke: Macmillan.

David Suzuki Foundation. (1992). *Declaration of Interdependence*. [Online]. Retrieved on 30 October 2006 from:  
[http://www.davidsuzuki.org/About\\_us/Declaration\\_of\\_Interdependence.asp](http://www.davidsuzuki.org/About_us/Declaration_of_Interdependence.asp)

DEFRA. (2005). *Securing the Future: The UK Government sustainable development strategy*. London: HMSO Cm. 6467.

Department of the Environment. (1990). *This Common Inheritance: Britain's Environmental Strategy*. London: HMSO Cm. 1200.

Diprose, R. (2002). *Corporeal Generosity: On giving with Nietzsche, Merleau-Ponty, and Levinas*. Albany, NY: State University of New York Press.

Dobson, A. (2003). *Citizenship and the Environment*. Oxford: Oxford University Press.

Dodds, K. (2006). *The Ice: unstable geographies of Antarctica*. In Clark, N., Massey, D. and Sarre, P (eds) *A World In the Making*. Milton Keynes: The Open University.

Forbes, D. K. (1990). *The Geography of Underdevelopment*. London: Routledge.

Fox, L. (2006). *Defence and energy security*. Speech at Chatham House 22 May 2006. [Online]. Retrieved on 30 October 2006 from:  
[http://conservativehome.blogs.com/torydiary/files/liam\\_fox\\_over\\_a\\_barrel\\_speech.pdf](http://conservativehome.blogs.com/torydiary/files/liam_fox_over_a_barrel_speech.pdf)

Global Commons Institute, (undated). *Contraction and Convergence*. [Online]. Retrieved on 30 October 2006 from: <http://www.gci.org.uk/contconv/cc.html>

Harrison, S., Massey, D., Richards, K., Magilligan, F. J., Thrift, N., & Bender, B. (2004). Thinking across the divide: perspectives on the conversations between physical and human geography. *Area* 36 (4), pp.435-442.

Held, D. (2003). *Cosmopolitanism: A Defence*. Cambridge: Polity.

Hutton, W. (2003). *The World We're In*, London: Abacus.

Interdependence Day Project Website, (2006). *Interdependence Day Project Homepage*. [Online]. Retrieved on 30 October 2006 from:  
www.interdependenceday.co.uk

Kenner, H. (1971). The Last Whole Earth Catalog. *New York Times book reviews section*. p7.

Keohane, R. O., Nye Joseph S., (1977). *Power and Interdependence: World Politics in Transition*. Boston: Little Brown.

Lovelock, J. (1979). *Gaia: A New Look at Life on Earth*. Oxford: Oxford University Press.

Massey, D., 2004. Geographies of Responsibility. *Geografiska Annaler Series B: Human Geography* 86B (1), pp.5-18.

Miliband, D. (2006) Cameron has substance – but it's nonsense. *The Spectator*, 14 October, p.20

Oldfield, J.D. and Shaw D.J.B. (2005). V.I. Vernadsky and the noosphere concept: Russian understandings of society-nature interaction. *Geoforum* 37, pp.145-154

Open2.net, (2006). Interdependence Day. [Online]. Retrieved on 30 October 2006 from <http://www.open2.net/interdependenceday/declaration.html> .

Philo, C. (2005). The Geographies that wound. *Population, Space and Place* 11, pp.441-454.

Rees, W. and Wackernagel, M. (1996) *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island BC: New Society Publishers.

Rose, G (2006). Envisioning Demands: photographs, families and strangers. In Barnett, C. and Robinson, J. (eds.) *A Demanding World*. Milton Keynes: Open University Press.

Rosenau, J. N. (1980). *The Study of Global Interdependence*. London: Francis Pinter.

Rosenau, J. N. (2005). Declaration of Interdependence. *International Studies Perspectives* 6 (1), pp.ii-ii

Simms, A. (2005). *Ecological Debt: The Health of the Planet and the Wealth of Nations*, London: Pluto Press.

Simms, A., Moran, D. and Chowla P. (2006). *The Interdependence Report*. London: new economics foundation.

Smith, J. (2006). *What do Greens Believe*. London: Granta.

Taylor, W. P. (1936). What is Ecology and What Good is it?. *Ecology* 17(3), pp. 333-346.

Tyszczyk, R. and Guy-Greaves, R (2006). We don't know when it's coming in. [Film] DV, 10 minutes. UK.

Wallace, H. A. (1944). *Democracy reborn, selected from public papers and edited with an introduction and notes by Russell Lord*. New York: Reynal & Hitchcock.

Weyler, R. (undated). *Greenpeace History: Declaration of Interdependence*.

[Online]. Retrieved on 30 October 2006 from:

[http://www.rexweyler.com/resources/green\\_declaration.html](http://www.rexweyler.com/resources/green_declaration.html)

World Consumption Cartogram, (2005). *World Consumption Cartogram*. [Online].

Retrieved on 30 October 2006 from:

<http://pthbb.org/natural/footprint/img/cartogram.gif>

Worster, D. (1977). *Nature's Economy*. Cambridge: Cambridge University Press.

WWF International (2006) Living Planet Report, WWF International, Gland.