



Dancing on a Double Edged Sword: Sustainability within University Corp.

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Abstract

This paper explores the two-way relationship between sustainability and the accelerating corporatisation of academia. It shows that ‘sustainability’ is capable of being mobilised to serve neo-liberal interests and further drive this corporatisation. However, the paper also argues that within the discourses and practices of sustainability lies a radical critique of the very neo-liberalism which seeks to exploit it. Moving beyond a binary framing of sustainability vs corporatisation the paper urges a wider and more active engagement with the double edged sword of sustainability within the corporate university.

Coming Clean

I’ll wager that neither of us, you or I, come entirely ‘clean’ to this interaction, shaped as we are by an obscure host of experiences, ideas and opinions. Neither are we ‘clean’ of the global implications of our everyday choices, from the sweat shop labour behind our underwear to the climate changing gasses emitted silently in our name wherever we go and whatever we do (Cook et al., 2007; Rising Tide, 2007; IPCC, 2007). Faced with such complexity it is tempting to give up, to



ignore evidence and bury links and implications along with our heads into the sand. This paper is my attempt to grapple with precisely these issues and this dilemma. Working in academia I am reminded daily of the growing corporate agenda and I question how ethical it can be to work in such a place. I see the ideas and practices of sustainability, which are my life's work, used in ever more elaborate, blunt and subtle ways to further this agenda. I see that compared with much of the mainstream corporate world beyond academia I live and work in a cosy place where I can set my own agenda, working towards a more sustainable world in my own way. Through this dialogic process I see that the relationship between sustainability and the growing neo-liberal corporatisation of academia is not yet fixed, it's up for grabs and we, you and I, can help to shape it.

Neo-liberalism vs. Sustainability?

In common with several disciplines, geography has an emerging body of work exploring how neo-liberal ideas and practices are shaping academia and helping to drive its corporatisation (Berg, 2006; Blomley, 2005; Bondi and Laurie, 2005; Larner et al, 2005; Kothari, 2005; Larner and Craig, 2005; Brown and Cloke this volume; Federici, this volume). My own research on the boundaries between 'activism' and academia has highlighted the ways in which this corporatisation has shrunk the spaces available for activism and radical research and practices within academia (Maxey, 2006). Sustainability represents a key contemporary radical intervention, with its commitment to participation, equity and social justice and its ability to embrace marginalised voices including Majority World masses, indigenous peoples, future generations, other species and the ecosystems upon which we all depend. Spaces to promote and work through sustainability within academia are shrinking under corporatisation. Furthermore, the conflict between neo-liberalism and sustainability goes far deeper than accelerated time pressures on would-be-advocates and budgets no longer capable of being siphoned off to support grassroots initiatives. There is an epistemological tension between neo-liberalism's privileging of the market and sustainability's insight that the economy is but a subset of (and tool to be used by) society and that in turn society is but a subset of the environment (see Fig 1). Corporations exist to maximise shareholder's profit, sustainability is a tool to enhance *all* life. Sustainability urges that people, other species and ecosystems exist for their own sake, they have intrinsic value and are intimately inter-connected.

Beware Binaries, Governmentality and Recuperation

It may not be such a clear case of neo-liberalism vs. sustainability as this suggests, however. Neo-liberalism is not fixed, given or singular, but fluid, complex and contested (Blomley, 2005; Bondi and Laurie, 2005; Larner et al, 2005; Kothari, 2005; Larner and Craig, 2005). The push to make academia 'relevant' to the world of work has a long heritage, as does its ability to serve the interests of powerful elites, these are not new gifts of corporatisation! However, the

‘relevance’ agenda itself can be used to create, for example, activist and public geographies which challenge corporatisation (Castree, 2000; Chatterton, 2006; Fuller and Kithcin, 2004; Maxey, 2004; Routledge, 2007).



Figure 1 Sustainability Rings (Source: WAG ESDGC in HE Project 2006).

Whilst a simple binary framing is to be avoided, then, it is crucial that academics, and geographers amongst them, deepen our understandings of how neo-liberalism and corporatisation operate and their various implications. Foucault’s notion of Governmentality is helpful in this regard, focusing attention on the subtle ways in which neo-liberalism’s values and ideas become internalised within our own processes of self-discipline and governance (ACME Editorial Collective, 2007). Another useful analytical tool I draw upon in this paper is the Situationist critique of recuperation, the process by which dominant paradigms, such as neo-liberalism, appropriate and subsume resistance (ag, 2007; Black, 1994; Vaneigem, 2008). Neo-liberalism is so adept at accommodating resistance and critique that a sensitivity to recuperation is invaluable when we look at sustainability, with its chequered history of use and abuse at the hands of various neo-liberal actors from the Business Council for Sustainable Development, through Shell and Exxon’s ‘Greenwash’ (Corporate Watch 2000, 2002; Doran, 1993; RisingTide, 2007; McCoy and McCully, 1993) to the UK government’s White Paper ‘Planning for a Sustainable Future’, which places economic globalisation and climate change as

inseparable policy goals (Department of Communities and Local Government, et al., 2007). Such recuperative urges demonstrate the importance of rigorous defining and defending of the ground upon which we stand.

To do this with sustainability means categorically maintaining its tripartite nature. Sustainability means environmentally, socially *and* economically sustainable actions and outcomes or it means nothing. Humans have the technical and social ability to achieve all three goals in everything we do and if civilisation is to outlive this century humans also have a burning need to achieve this (McDonough and Braungart, 2002). So what's the catch? Sustainability's 'catch' is the deep social, cultural, political and economic transformation that it requires. With its emphasis on social justice, equity and participation sustainability requires flatter, more horizontal and less hierarchical organisation (Warburton, 2000; Sterling, 2001). It urges us individually and collectively to ask the big questions (Maxey, 2007) such as 'How is education important in my life?', 'What *is* academia?', 'Why do we need research?' and 'How do universities serve society?' Sustainability offers a holistic approach which challenges us to look beyond academia's often myopic specialism and reductionism. In this regard it is a natural ally to geography, able to cross disciplinary boundaries. Finally, sustainability offers a range of tools to aid our analysis of all the choices we face, from the mundane to the profound, including lifecycle analysis, cradle to cradle design and ecological footprinting.

Applying sustainability's insights to academia requires that it is embraced within every sphere of the university, including education, infrastructure and research. Despite the growing pressure placed upon universities to engage with sustainability, and their increasing willingness to at least talk about it, there remain few examples of this whole institution approach being adopted in practice. In the remainder of this paper I look at each area in turn to explore the ways in which sustainability can challenge and/or reinforce the push towards University Corp.

Education for Sustainability

Education for sustainability (EfS), or at least its predecessor Education for Sustainable Development and Global Citizenship (ESDGC)², has become an established policy goal for every tier of Government, from the UN down. Indeed, the UN has declared 2005-2015 its 'Decade of ESD' (GDRC, 2008). Whilst

² ESDGC was the forerunner to EfS. Whilst both are still commonly used, EfS has a more explicit and worked through commitment to the inclusive, emancipatory approach to education I outlined above, whilst ESDGC has its roots more firmly in the adultist view that the world will be a better place if we indoctrinate the 'next generation' appropriately. ESDGC often also carries with it implicit norms associated with 'progress' and 'development' and would greatly benefit from a rigorous post-colonial critique.

implementation of this agenda by member states has been sporadic, it remains a tool around which we can all mobilise when lobbying governments and our institutions and working for more effective, inclusive education. This potential can be illustrated by the UK, where, despite slow initial take up, the HE Funding Councils now have clear policies promoting ESDGC. Despite the push for corporatised education which views students as ‘sausages in the sausage factory’ (Smith) and favours fee paying international students and large group, mass-produced courses, universities must account for what they are doing to address sustainability within their curricula. Universities and critical academics alike have so far largely failed to grasp the potential of EfS to radically democratisise campus education through the value it places upon participation and the knowledge of all actors (Warburton, 2000). There is a growing consensus that EfS involves a holistic, inclusive approach to shared learning (GDRC, 2008; Sterling, 2001; Jucker, 2002; ESDGC Wales website, 2008). This places the ‘teacher’ in an active learning role and challenges the rigid hierarchies between ‘students’ and ‘lecturers/professors’ which have built up within our institutions and in many ways are hardening and deepening under neo-liberalism (see, for example, Federici, this volume). Strong parallels exist between EfS and the critical pedagogies being developed within geography (Goodman, forthcoming; Cook et al., 2007) and radical democracy (Giroux, 2007), although these remain largely unexplored.

There is a danger, however, that EfS initiatives merely tinker with the fringes whilst the core of academia continues to shift towards a neo-liberal paradigm. My own work over the last ten years illustrates this double edged sword of radical liberatory potential and neo-liberal complicity/recuperation within EfS. The Lifelong Learning (LLL) agenda, so readily entwined with EfS, for example, could significantly help to break down barriers to education amongst marginalised groups. This was one aim of a HE Certificate in Sustainability I co-founded in 2003 and which won national recognition in 2005. The course has offered a path into HE for those without formal qualifications and perhaps more importantly has directly inspired many people, such as the woman who recently started Swansea’s fifth local produce market following a course on Sustainable Food. However, the very department through which this course has run is under threat of closure for failing to deliver the ever narrower goals of the Uni. Corp! Implementing EfS in our own lives and work is important and offers great liberatory potential. Given the advanced stage of corporatisation within academia, however, it is not enough and needs to be married to wider and more strategic action.

To complete the UK EfS example, such a strategic opportunity for change exists right now in the UK, as consultation begins on the Research Excellence Framework (REF), the future means by which Universities’ research will be measured and rewarded. Each of us can help persuade the funding councils of the contradictions between their commitment to sustainability and quality education on one hand and their means of assessing and rewarding institutions on the other. If

they are serious about sustainability and education they must assess these directly and reward them appropriately!

Getting Our Estate in Order

A crucial lesson from EfS research over the last ten years is that people learn more from the actions of others than they do from their words (Jucker, 2002; Sterling, 2001). Put crudely: incorporating sustainability into every module on campus this will have less impact than actually running the campus more sustainably! Despite this, our campuses, with a few exceptions, are so very far from showing leadership in implementing sustainability! It is far easier to introduce a token course on sustainability than it is to change the way the institutions is built, powered, heated and run.

We are, however, seeing some changes. So far these changes remain mostly motivated by senior management's narrow financial concerns, yet they are often implemented by people with the kind of holistic commitment to sustainability that our institutions so desperately need. Harvard, for example, has placed itself as a world leading 'green campus' in large part due to the commitment and vision of its employees. However, as Silvia Federici notes (this volume), this 'greening' runs in parallel with a neo-colonial corporate agenda bent on globalising its courses irrespective of the ecological and social costs. This example highlights how technologies sharpen both blades of the double edged sword. E-learning, for example, can contribute to both a globalising corporatisation of academia (Federici, this volume) and to radically opening participation to previously marginalised groups³. Similarly, video conferencing is capable of supporting a globalising neo-liberal agenda, as its extensive use by global corporations illustrates, yet it can also open up access to conferences and reduce academics' excessive climate changing emissions. So far, however, critical geographers have largely ignored this potential. Following a successful Participatory Geographies Working Group session hosted by Dorothea Klein and myself at the 2006 Conference, the Royal Geographical Society is now committed to supporting the use of video conferencing for precisely these reasons. The Association of American Geographers, however, has consistently ignored requests from myself and others to even experiment with this tool, fearing it would be too costly. If enough people push for it, however, we could have video conferencing at every international conference, extending participation to those unable or unwilling to fly.

The drivers for change within campus estates are similar to those for EfS. In the UK, for example this begins with policy pressure from national government and

³ For an example of this within EfS see London South Bank University's EFS Programme in the Web Resources section below.

through them the funding councils and other interested bodies. The UK Audit Commission, for example, published a damning report in 2004, highlighting the waste within the sector and placing further pressure on institutions to get campus estates in order. Equally, public procurement initiatives ensure that campus wide purchasing decisions consider not only economic but also social and environmental implications. Other drivers, however, deserve attention. Students are increasingly mobilised around issues pertinent to sustainability as the growth of the UK based 'People and Planet' network and the NUS campaign illustrate. Under consumer-driven neo-liberalism the consumer is king and every dollar a vote, so we should emphasise students' power to shape Uni. Corps' agenda. Staff are also active agents of change and sustainability requires that all are able to participate actively in setting and implementing the agenda. At Swansea University I co-founded the Sustainability Forum, which was initially limited to all staff, but now includes students. This forum is a direct attempt to ensure the opinions, knowledge and good will found throughout our campuses is given a voice within Uni Corp and it uses the sustainability agenda to achieve this. There is great potential for a pincer movement here, with such grass roots initiatives 'from below' combining with policy pressures from governments 'above' making it increasingly difficult for senior managers to ignore sustainability and its radical implications. However, a sensitivity to the processes of recuperation and governmentality suggest such an engagement requires constant vigilance and mutual support to identify and resist repression, assimilation and manipulation.

Whilst bringing students and staff together is still a relatively rare and innovative initiative, it still misses two further groups of actors capable of driving the sustainability agenda: the wider public and corporations themselves. The last twenty years of academic corporatisation have been marked by surprisingly little meaningful engagement with the mass of people beyond the ivory tower. This public, however, have the ultimate power to shape the very government policies driving the corporatisation agenda in first place. If people see academia as relevant to their own lives, rather than an ivory tower set apart, this mobilisation becomes possible. The People's geography project, Public Geographies Working Group and similar initiatives offer exciting opportunities to build such bridges and support a more widespread mobilisation (see Web Resources below). Indeed, the massive increase in popular awareness of climate change and peak oil over the last two years demonstrates the potential for the movement of ideas and impetus between academia and the wider public. Ironically, corporations themselves often act as drivers for change, moving more quickly than cumbersome and bureaucratic universities. They are, in some cases pushing the sustainability agenda further and faster and dragging Uni Corp along behind them. The key to all of this, I suggest is seizing the opportunities presented by these various drivers before the corporatisation of academia is complete and doing so within a mutually supportive framework where we can explore tensions/contradictions and resist recuperation and oppression. Most universities are not yet entirely sold to the market. They do

not yet exist to produce profit for their shareholders and whilst they have other aims at their core there is *everything* to fight for.

Sustainable Research?

Parallel to the challenge of bringing staff, students and the public together is the challenge of bringing *research* into the movement for sustainability alongside curriculum and campus infrastructure. A dominant paradigm persists within academia that privileges research above all else suggests it should not be governed by the same rules we apply to everything else, as this quotation from a leading physical geographer suggests: 'It's right and proper that we should be implementing sustainability in the way we run the campus and in our teaching, but I don't think you can apply it to research.'⁴

Underpinning this paradigm is the assertion that there is value in 'pure' research which can be 'objective' and politically 'neutral'. The corporatisation agenda has perhaps done more than even the work of critical scholars such as Donna Haraway (1988) to disrupt such assertions. In many areas of research, such as genetic engineering and synthetic biotechnology, corporate funding clearly sets the research agenda, determining what, where, when, why and by whom research is carried out. Yet the corporate agenda also shapes research in more subtle ways, sponsoring buildings and equipment rather than direct research, for example. Research into sustainability is increasingly drawn into, or recuperated by this more nuanced sphere. I am currently part of 'Sustainable Construction Knowledge Wales' an EU funded TTN (Technology Transfer Network) which brings researchers and businesses together in the field of sustainable construction (see Web Resources below). This project has opened up several new and exciting projects, putting sustainability research directly into practice. However, it also forms part of a wider agenda of corporatisation, driven in this case by the EU, whereby corporations are directly invited to help set the research agenda. Research thus becomes a tool to help corporations maximise their profit. This example not only illustrates once more the double edged sword of engaging with sustainability within neo-liberal academia, it also demonstrates that *all* research should be evaluated for its contribution to sustainability in the widest possible sense.

Taking sustainability seriously within research has significant implications for power relations. As mentioned above, sustainability requires flatter, more horizontal and less hierarchical organisation in which the knowledge and active participation of all actors is valued. This directly contradicts the trend towards more hierarchical divisions under neo-liberalism. Whilst this shift often goes

⁴ This quotation forms part of an on-going research project exploring the ways in which sustainability and climate change are produced and contested across a range of knowledge claims.

unchallenged, due to our own internalised governmentality, it is perfectly real, as the current national pay bargaining agreement in the UK illustrates. Whilst superficially creating a more level playing field by placing all those within HE and FE on the same pay scale, in reality professors and senior management are left completely out of the pay structures, so their salaries can continue to rocket whilst the rest of the sector's pay further shrinks in real terms against comparable professions (UCU, 2008).

I am not proposing that any research per se be banned, or that the scope of research be limited in any way, but that we ask, individually and collectively, 'What kind of research do we want?' Sustainability urges such questioning and can help inform our answers. Despite the dominant paradigm which seeks to keep 'pure' research in an ivory tower, it is vital that we look at the research we support, directly and indirectly and the direction in which it is taking us. We can develop more sophisticated tools to help us evaluate research. Just as Full Economic Costing has been brought into UK universities, so can LCA and other methodologies help us to incorporate sustainability into our awareness of what the full social, environmental *and* economic costs of our research will be. To achieve this we do not need overly burdensome bureaucracy or crystal balls, but intelligent and responsible assessment of all proposed research. This will enable us to tease out conflicts, contradictions, ethical dilemmas and cultural (in)sensitivities currently buried within much research. This approach will help to render explicit the western prejudice behind well intentioned, yet highly inappropriate research such as that into GE 'golden rice' (ISIS, 2008) or the synthetic biotechnology project to replace small scale farmers' production of malaria treatment Artemisinin with global corporate control of production by Novartis (Thomas, 2007). It would also allow us to evaluate the opportunity costs associated with research. A small fraction of the funding currently directed towards military research (Stavrianakis, this volume) and nuclear power, for example, could help provide renewable energy for all within twenty years (CAT, 2007). At the very least all research should be carbon neutral and ideally undergo a full sustainability appraisal, like any other aspect of university activity.

Taking it Forward

The relationship between sustainability and corporatisation in academia is not a simple, binary one, but is contested, on-going and very much up for grabs. As you read this you can choose how this relationship develops. Whilst my very emphasis on your choice is a classical neo-liberal technique to draw upon your own internalised governmentality, it is one I seek to render explicit and further illustrates the double edged sword upon which I dance. Will you join me?

References

- ACME Editorial Collective. 2007. [The Politics of Indexing and Ranking Journals](#). *ACME: An international e-journal for critical geographies*. 6, 2, 131-134.
- ag. 2007. Turning Rebellion Into Money. <http://www.eatfrenchbread.com/turning-rebellion-into-money/> (last accessed 3/03/08).
- Berg, Lawrence. 2006. Hierarchical space: Geographers and neoliberalism. *Progress in Human Geography* 30(6), 764-769 and 778-782.
- Black, Bob. 1994. The Realization and suppression of situationism. *Journal of Unconventional History*, (Archived at Spunk Library: <http://www.spunk.org/texts/writers/black/sp001671.html> last accessed 3/03/08).
- Blomley, Nicholas. 2005. Professional geographies. *Antipode* special edition on working the spaces of neoliberalism: Activism, professionalisation and incorporation. 37, 3, 619-622.
- Bondi, Liz and Nina Laurie. 2005. Introduction. *Antipode* special edition on working the spaces of neoliberalism: Activism, professionalisation and incorporation. 37, 3, 393-401.
- Brown, Ed and Jonathon Cloke. (forthcoming). Corporate social responsibility in higher education. *ACME: An international e-journal for critical geographies*.
- Castree, Noel. 2000. Professionalisation, activism and the university: Whither 'critical geography?'. *Environment and Planning A*, 32, 6, 955-70.
- CAT. 2007. Zero carbon Britain: An alternative energy strategy. Machynlleth, Wales: CAT available at www.zerocarbonbritain.com (last Accessed 3/03/08).
- Chatterton, Paul. 2006. "Give up activism" and change the world in unknown ways: Or, learning to walk with others on Uncommon ground. *Antipode*. 38, 2. 259-281.
- Corporate Watch. 2000. Shell's climate greenwash. <http://www.corpwatch.org/article.php?id=925> (last accessed 3/03/08).
- Corporate Watch. 2002. Greenwash + 10. The UN's Global Compact, Corporate Accountability and the Johannesburg Earth Summit. <http://www.corpwatch.org/article.php?id=1348> (last accessed 3/03/08).

Cook, Ian, James Evans, Helen Griffiths, Rebecca Morris and Sarah Wrathmell. 2007. 'It's more than just what it is': Defetishising commodities, expanding fields, mobilising change? *Geoforum* 38 (6) 1113-1126.

Department of Communities and Local Government with Department of the Environment, Food and Rural Affairs, Department of Trade and Industry and Department of Transport. 2007. Planning for a Sustainable Future: White Paper. <http://www.communities.gov.uk/publications/-planningandbuilding/planningsustainablefuture> (last accessed 3/03/08).

Doran, Peter. 1993. The earth summit (UNCED): Ecology as spectacle. *Paradigms: The Kent Journal of International relations*, special edition on The Environment and International Relations. 7, 1, 55-65.

ESDGC Wales website. 2008. <http://www.esd-wales.org.uk/>

Federici, Silvia. (forthcoming). Education and the enclosure of knowledge in the global university. *ACME: An international e-journal for critical geographies*.

Fuller, Duncan and Robert Kitchin. 2004. Radical theory/critical praxis: Academic geography beyond the academy? In, Duncan Fuller and Robert Kitchin,(eds.), *Radical Theory, Critical Praxis: Making a Difference Beyond the Academy?* Praxis (e) Press, Critical Topographies Series, Okanagan University College, Vernon and the University of Victoria, Victoria, BC, Canada, pp 1-20, <http://www.praxispress.org/availablebooks/radicaltheory/-criticaltheorycriticalpraxis.html>

GDRC. 2008. United Nations Decade of Education for Sustainable Development: UNDES. <http://www.gdrc.org/sustdev/un-desd/index.html> (last accessed 3/03 /08).

Giroux, Henry. 2007. *The University in Chains: Confronting the Military-Industrial-Academic Complex*. Boulder, CO: Paradigm.

Goodman, Mike. forthcoming. Placing citizen-students: Connecting consumption, commodities and 'critical' students in a large classroom setting. *Journal of Geography in Higher Education*.

Haraway, Donna. 1988. Situated knowledges: The science question in feminism as a site of discourse on the privilege of partial perspective. *Feminist Studies*. 14, 575-599.

Intergovernmental Panel on Climate Change. 2007. *Fourth Assessment Report Climate Change 2007: Synthesis Report*. Geneva, Switzerland: IPCC.

- ISIS. 2008. The 'Golden Rice' - An Exercise in How Not to Do Science. <http://www.i-sis.org.uk/rice.php> (last accessed 3/03 /08).
- Jucker, Rolf. 2002. *Our Common Illiteracy: Education as If the Earth and People Mattered*. Oxford, UK: Peter Lang.
- Kothari, Uma. 2005. Authority and Expertise: The professionalisation of international development and the ordering of dissent. *Antipode* special edition on working the spaces of neoliberalism: Activism, professionalisation and incorporation. 37, 3, 425–446.
- Larner, Wendy and David Craig. 2005. After neoliberalism? Community activism and local partnerships in Aotearoa New Zealand *Antipode* special edition on working the spaces of neoliberalism: Activism, professionalisation and incorporation. 37, 3, 402–424.
- Laurie, Nina, Robert Andolina, and Sarah Radcliffe, 2005. Ethnodevelopment: aocial movements, creating experts and professionalising indigenous knowledge in Ecuador. *Antipode* special edition on working the spaces of neoliberalism: Activism, professionalisation and incorporation. 37, 3, 470–496
- Maxey, Larch. 2004. Moving beyond from within: Reflexive activism and critical Geographies. In, Duncan Fuller and Robert Kitchin (eds.), *Radical Theory/Critical Praxis: Making A Difference Beyond the Academy?* Praxis (e) Press, Critical Topographies Series, Okanagan University College, Vernon and the University of Victoria, Victoria, BC, Canada, pp. 159-171 <http://www.praxis-epress.org/rtcp/ljm.pdf>
- Maxey, Larch. 2007. From organic to sustainable agriculture? The social, cultural and ecological construction of 'sustainable' food chains. In, Lewis Holloway, Moira Kneafsey and Damian Maye (eds.), *Constructing 'Alternative' Food Geographies: Representation and Practice*. Camberley, Surrey, UK: Elsevier.
- Maxey, Larch. 2006. Autonomy and sustainability in the academy: Tensions and transgressions. Paper presented at the Annual Meeting of the Royal Geographical Society with the Institute of British Geographers, London, August.
- McCoy, Michael and Patrick McCully. 1993. Introduction. In, Ian Tellam, and Pratap Chatterjee (eds.), *The Road From Rio: An NGO Guide to Environment and Development*. International Books, Utrecht and WISE, Amsterdam, pp. 5-7.

McDonough, William and Michael Braungart. 2002. *Cradle to Cradle: Remaking the Way We Make Things*. New York: North Point Press.

Rising Tide. 2007. *The Rising Tide Coalition for Climate Justice Political Statement*. <http://risingtide.org.uk/about/political> (last accessed 3/3/08).

Routledge, Paul. 2007. Protesting and empowering: Alternative responses to global forces. In, Ian Douglas, Richard Huggett and Chris Perkins (eds.), *Companion Encyclopaedia of Geography: From Local to Global*. Oxon: Routledge. pp. 927-940.

Stavrianakis, Anna. (forthcoming). In arms way: Arms company involvement in education. *ACME: An international e-journal for critical geographies*.

Stirling, Stephen. 2001. *Sustainable education: Revisioning learning and change*. Bristol, UK: Green Books & The Schumacher Society.

Thomas, Jim. 2007. Constructing life: In whose interests? Paper presented at the Rathenau Institute, Den Haag, Netherlands, September. Video available at <http://www.rathenau.nl/showpage.asp?steID=1&item=2492> (last accessed 3/03/08).

UCU. 2008. UCU Says time to talk as members vote no to negotiation changes. <http://www.ucu.org.uk/index.cfm?articleid=3125> (last accessed 3/03/08).

Vaneigem, [Raoul](#). 2008. *The Revolution of Everyday Life*. Red & Black http://library.nothingness.org/articles/SI/en/pub_contents/5 (last accessed 3/03 /08).

Warburton, Diane. 2000. A passionate dialogue: Community and sustainable development. In, Diane Warburton (ed.), *Community and Sustainable Development: Participation in the Future*. London: Earthscan, pp.1-39.

Web Resources

Autonomous Geographies Project: <http://www.autonomousgeographies.org/>

ESDGC Wales: <http://www.esd-wales.org.uk/>

London South Bank University's EFS Programme: <http://www.lsbu.ac.uk/efs/>

Public Geographies Working Group:
<http://www.gees.bham.ac.uk/research/pgwg/index.htm>

PEANuT: http://northumbria.ac.uk/sd/academic/sas/sas_research/pa//

Sustainable Construction Knowledge Wales:

<http://www.constructionknowledgewales.org.uk/>

The People's Geography Project: <http://www.peoplesgeographyproject.org/>

Zero Carbon Britain: www.zerocarbonbritain.com