

SOCL521

Environment and Culture

Module Handbook
Michaelmas term 2007

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MA in Society, Technology and Nature
Lancaster University,

General information

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<i>Time</i>	Michaelmas Term, Mondays 14.00-16.30
<i>Venue</i>	<i>Furness C50</i>

Course aims

- to provoke fresh first-hand thinking about environmental problems;
- to explore the role that social science can play by clarifying how such problems relate to issues of culture, meaning and knowledge formation.
- to examine the political and cultural challenges involved in addressing such problems through existing institutional frameworks;

Course approach

We show how the treatment of environmental issues is influenced by social and cultural factors in such domains as climate change, GM crops, sustainable development and nuclear power. The complexities for environmental judgement and decision-making arising from the influences of such processes will be explored in critical discussions in the seminars.

Learning outcomes

After taking this module, students should be able to:

- discuss major approaches in the sociological understanding of 'the environment';
- understand the various epistemological positions (for example, 'realism' and 'constructivism') implicit and explicit in the various social-theoretical approaches used in sociological approaches to environmental problems and issues;
- be able to apply the ideas of key social theorists and schools of sociological thought relevant to the understanding of environmental issues.
- demonstrate clear thinking; and
- present critical analyses of different sociological approaches to the environment in discussion and in writing.

Reading

During the last decade or so there has been a significant contribution from the social sciences (and the humanities) in developing more cultural approaches to environmental issues, environmental politics and its relationship to everyday life. It is especially important that you read the key readings, follow the arguments, attend all the lectures and participate in the seminars. It is always productive to reflect on what you read. This may take the form of detailed summarising, analysis of how this connects (or not) to current issues and how these are reported in the media, reflection in relation to personal experience, discussions with colleagues over coffee, and so on. You should develop your own personal interests through a range of cultural media and debate. In particular you should attune yourself to on-going cultural and media debates through routine reading of broadsheets, political magazines, and relevant policy publications. The Web is an invaluable resource keeping in tune with such debates.

Seminar presentations

Being able to explain ideas clearly to others is a key intellectual skill that the course aims to encourage. There are many ways of developing this skill within the module. In each of the seminars, students will be encouraged to make short presentations on selected issues arising from the seminar reading of the week. These will provide the springboard for group discussion of the lecture and associated readings. If you do a presentation, you should think about using handouts, the overhead projector, data projector or other forms of visual material. And make sure you don't just describe what the paper says but bring some of your own thoughts in

Assessment arrangements

The assessment of the course will consist of one long research essay of up to 5,000 words. This paper should be submitted by 4 pm on Friday 18 January. A list of suggested essay topics will be distributed early in the term; any other essay topic must be appropriately related to the central themes and aims of the module, and will need to be approved by the course tutor. The paper will need to be in standard discursive essay form, with a bibliography and a pattern of argument that is much like the papers you will find in the readings for the module. The criteria for marking MA essays in Sociology are in the MA STN handbook.

General readings

The following books are useful general reading for the course:

- Phil Macnaghten and John Urry (1998) *Contested Natures*, London: Sage.
Bell, Michael (1998) *An Invitation to Environmental Sociology*, Thousand Oaks: Pine Forge Press.
Frans Berkhout, Melissa Leach and Ian Scoones (eds) (2003) *Negotiating Environmental Change: New Perspectives from Social Science*. Edward Elgar
Noel Castree (2005) *Nature*, London: Routledge.
Jane Franklin (ed.) (1998) *The Politics of Risk Society*. Cambridge: Polity
Ramachandra Guha, *Environmentalism: A Global History*, Longman, 2000
Alan Irwin (2001) *Sociology and the Environment*. Cambridge: Polity
John McNeil (2001) *Something new under the sun. An environmental history of the 20th Century*. Penguin
Lash, Scott, Bronislaw Szerszynski and Brian Wynne, eds (1996) *Risk, Environment and Modernity: Towards a New Ecology*, London: Sage.

These readings might also be useful:

- Adrian Franklin (2002) *Nature and Social Theory*. London: Sage (DUHN)
Maartin Hajer (1995) *The Politics of Environmental Discourse: ecological modernization and the policy process*. Oxford: Clarendon Press.(DUHN)
Maartin Hajer and Frank Fisher, F. (1999) 'Beyond global discourse: the rediscovery of culture in environmental politics', in Maartin Hajer and Frank Fisher, F. (eds.) *Living with Nature*. Oxford: Oxford University Press
Michael Jacobs (1999) *Environmental Modernisation: The New Labour agenda*. London: Fabian Society
Michael Jacobs (ed.) *Greening the Millennium: The New Politics of the Environment Oxford: Political Quarterly/Blackwell (RAYG7)*

- Sheila Jasanoff (2005) *Designs on Nature: Science and democracy in Europe and the United States*. Princeton University Press: New Jersey
- Kuletz, Valerie (1998) *The Tainted Desert: Environmental Ruin in the American West*, New York: Routledge.
- John McCormick (1995) *The Global Environmental Movement* London: Bellhaven
- Michael Redclift and Ted Benton (eds.) *Social Theory and the Global Environment*. London: Routledge
- Wolfgang Sachs (ed.), *Global Ecology: A New Arena of Political Conflict* (pp. 3-21). London: Zed Books. (DUHN7)

Syllabus

1 Introduction: The Environment and the Social Sciences

Content:

Introduces the course with discussion of the rise of 'the environment' both as a complex of physical challenges for industrial societies, and as arising from embedded patterns of thought and practice in Western culture. We will briefly look at the historical context for the general neglect of nature in the social sciences, and look at some of the main theoretical approaches that have been used in recent sociology of the environment. We will discuss the epistemological positions that are implicitly or explicitly taken by the more recent sociological approaches to environment, and the implications of these positions for the way we understand environmental problems today.

Key reading:

Irwin, Alan (2001) *Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge*, Cambridge: Polity Press, 'Introduction', pp. 1-30. (DUHN)

Further reading:

Burningham, K. and G. Cooper (1999) 'Being Constructive: Social Constructionism and the Environment,' *Sociology*, 33(2), pp. 297-316. (K6 – and full text version in PDF format available from <http://www.journals.cup.org>, free from Lancaster University terminals)

Castree, Noel (2005) *Nature*, London: Routledge.

Dickens, Peter (1992) *Society and Nature: Towards a Green Social Theory*, Hemel Hempstead: Harvester Wheatsheaf, chapter 8, 'Society and Nature: From Theory to Practice', pp. 175-198. (KAT)

Eder, Klaus (1996) *The Social Construction of Nature: A Sociology of Ecological Enlightenment*, London: Sage, chapter 1, 'The Theoretical Construction of Nature: A Critique of Naturalistic Theories of Evolution', pp. 7-32. (AFYE)

Gare, Arran (1995) *Postmodernism and the Environmental Crisis*, London: Routledge. (AFYE)

Hannigan, John A. (1995) *Environmental Sociology: A Social Constructionist Perspective*, London: Routledge. (DUHN)

Irwin, Alan (2001) *Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge*, Cambridge: Polity Press, chapter 7, 'Society, Nature, Knowledge: Co-constructing the Social and the Natural', pp. 161-187. (DUHN)

Macnaghten, Phil and John Urry (1995) 'Towards a Sociology of Nature,' *Sociology*, 29, pp. 203-220. (K6)

Macnaghten, Phil and John Urry (1997) *Contested Natures*, London: Sage, chapter 1, 'Rethinking Nature and Society', pp. 1-31. (DUHN)

McNeil, John (2001) *Something New Under the Sun: An Environmental History of the 20th Century*, Harmondsworth: Penguin.

Martell, Luke (1994) *Ecology and Society: An Introduction*, Cambridge: Polity Press, chapter 6, 'Rethinking Relations Between Society and Nature', pp. 164-183. (DUHB)

Soper, Kate (1995) *What is nature?: culture, politics and the non-human*, Cambridge: Blackwell.

2 *Modernity and the environment*

'Modernity' is one of the key concepts of social theory, and has been particularly prominent in attempts to theorise the environmental problematic. Is the project to dominate and transform nature inherent to modernity? Or is the ecological crisis the result of an incomplete modernisation? In this session we will explore such questions, looking at various accounts of the relationship between modernity and the environmental crisis.

Key reading:

Toulmin, Stephen (1990) *Cosmopolis: The Hidden Agenda of Modernity*, Chicago: University of Chicago Press, chapter 1, 'What is the problem about modernity?', pp. 5-44. (AGYT)

Further reading:

Adam, Barbara (1998) *Timescapes of Modernity: The Environment and Invisible Hazards*, London: Routledge. (KDW)

d'Entrèves, Maurizio Passerin and Seyla Benhabib, eds (1996) *Habermas and the Unfinished Project of Modernity*, Cambridge: Polity. (AE.H1)

Gare, Arran (1995) *Postmodernism and the Environmental Crisis*, London: Routledge. (AFYE)

Harvey, David (1996) *Justice, Nature and the Geography of Difference*, Cambridge, Mass; Oxford. UK: Blackwell Publishers. (KCD)

Merchant, Carolyn (1980) *The Death of Nature: Women, Ecology, and the Scientific Revolution*, San Francisco: Harper and Roe. (AK3.E)

Szerszynski, Bronislaw (1996) 'On Knowing What To Do: Environmentalism and the Modern Problematic,' in *Risk, Environment and Modernity: Towards a New Ecology*, ed. Scott Lash, Bronislaw Szerszynski, and Brian Wynne, London: Sage, pp. 104-137. (KDW)

3 *Risk Society*

This week we look at Ulrich Beck's claim that we now live in a qualitatively new kind of society, one he calls 'risk society', in which technological risks have become the key organising factor. For Beck the effects of such risks stretch far beyond physical realm; they impact on societal institutions, the everyday lifeworld and human consciousness itself. We will also look at the various critiques of that have been made of Beck's claims, including those that see him as overemphasising the newness of contemporary risks, and those that see him as having a too cognitivist and disembodied conception of risk.

Key reading:

Beck, Ulrich (1992) *Risk Society: Towards a New Modernity*. London: Sage, chapter 1, 'On the Logic of Wealth Distribution and Risk Distribution', pp. 19-50. (KDW)

Further reading:

Beck, Ulrich (1995) *Ecological Politics in an Age of Risk*. Cambridge: Polity. (RAYG)

Beck, Ulrich (1996) 'Risk Society and the Provident State,' in *Risk, Environment and Modernity: Towards a New Ecology*, ed. Scott Lash, Bronislaw Szerszynski, and Brian Wynne, London: Sage, pp. 27-43. (KDW)

Beck, Ulrich, Anthony Giddens, and Scott Lash (1994) *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order*. Cambridge: Polity Press.

- Goldblatt, David (1996) *Social Theory and the Environment*, Cambridge: Polity Press, chapter 5, 'The Sociology of Risk: Ulrich Beck', pp. 154-187. (DUHB)
- Irwin, Alan (2001) *Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge*, Cambridge: Polity Press, Chapter 2, 'The Risk Society Thesis: The End of the World As We Know It?', pp. 50-69. (DUHN)
- Scott, Alan (2000) 'Risk Society or Angst Society? Two Views of Risk, Consciousness and Community', in *The Risk Society and Beyond: Critical Issues for Social Theory*, ed. Barbara Adam, Ulrich Beck and Jost van Loon, London: Sage, pp. 33-46. (AYFJ)

4 *Ecological modernisation*

Ecological modernisation is an influential school of thought, according to which improvements in environmental protection can best be brought about not through legislation but through a combination of scientific and technical innovation and market forces. In this session we take a critical look at ecological modernisation both as a policy discourse and a strand of environmental sociology.

Key reading:

Christoff, P. 1996, 'Ecological Modernisation, Ecological Modernities', *Environmental Politics*, vol. 5, no. 3, pp. 476-500.

Further reading:

- Blühdorn, I. (2007) 'Sustaining the Unsustainable: Symbolic Politics and the Politics of Simulation', *Environmental Politics*, Vol. 16, No. 2, 251 – 275.
- Buttel, Fred (2000) 'Ecological modernization as social theory', *Geoforum* 31: 57-65.
- Gibbs, David (2003) 'Editorial: Reconciling Economic Development and the Environment', *Local Environment*, Vol. 8, No. 1, 3–8.
- Hajer, M.A., 1995, *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*, Oxford, UK, Oxford University Press, ISBN 0198279698.
- Hajer, M. (1996), 'Ecological modernisation as cultural politics', in Lash, S., Szerszynski, B., Wynne, B. (Eds), *Risk, Environment and Modernity: Towards a New Ecology*, Sage, London, pp.246-68..
- Dana R. Fisher and William R. Freudenburg (2001), 'Ecological Modernization and Its Critics: Assessing the Past and Looking Toward the Future', *Society and Natural Resources*, 14:701–709.
- Mol, A.P.J., 2001, *Globalization and Environmental Reform: The Ecological Modernization of the Global Economy*, Cambridge, Ma., MIT Press,

5 *Marxism and the environment*

Marx's theoretical analysis of the capitalist mode of production and extraction of value from nature and labour involved the concept of alienation as central in human relations with nature or the environment as well as between the ownership and the productive social classes. Not only Marxist but other critical perspectives on prevailing social political and economic organisation have clung to the conviction that realist ontological and epistemological principles are essential for sustaining meaningful critical force – otherwise, they fear, relativism will allow any such critical claims to be undermined and rendered impotent. The move to accommodate the reflexive turn, and the associated idea that social-realist ontology may be negotiable, while still retaining an effective critical standpoint, is explored through the 'red-green' neo-Marxist perspectives and critiques of these.

Key reading:

O'Connor, James (1996) 'The Second Contradiction of Capitalism', in Benton, T. (ed) *The Greening of Marxism*, New York: The Guilford Press, pp. 197-221.

Further reading:

Benton, Ted (1997) 'Beyond Left and Right? Ecological Politics, Capitalism and Modernity,' in *Greening the Millenium? The New Politics of the Environment*, ed. Michael Jacobs, Oxford: Blackwell, pp. 34-46. (RAYG7)

Burkett, P (1999), *Marx and Nature: A Red and Green Perspective*, New York, St Martin's Press

Clark, J (2001), "Marx's Natures: a Response to Foster and Burkett", *Organisation and Environment*, vol.14, (4), pp.432-42.

Dickens, Peter (1992) *Society and Nature: Towards a Green Social Theory*, Hemel Hempstead: Harvester Wheatsheaf. (KAT)

Dickens, Peter (1996) *Reconstructing Nature: Alienation, Emancipation and the Division of Labour*, London: Routledge. (DUHN)

Dickens, Peter (2004) *Society and Nature: Changing Our Environment, Changing Ourselves*, Oxford: Polity. (not in library)

Foster, John Bellamy (2000) *Marx's Ecology: Materialism and Nature*, Monthly Review Press. [Not in library]

Irwin, Alan (2001) *Sociology and the Environment: A Critical Introduction to Society, Nature and Knowledge*, Cambridge: Polity Press, 'Introduction', pp. 1-30. (DUHN)

Moore, Jason W. 2000. "Environmental Crises and the Metabolic Rift in World-Historical Perspective." *Organization and Environment* 13(2): 123-157.

6 Social Movements

Content:

This session looks at the ways in which the concept of the 'social movement' might be useful for the social-theoretical understanding of environment, culture and society. We will explore a number of different emphases made by different authors in this field: between those seeking to understand the way that social movements mobilise resources in response to specific grievances, and those who seek to understand them as symptoms and carriers of wider social and cultural processes; and between theorists analysing them in terms of the pursuit of political goals, and those focussing on social movements as 'laboratories' for the generation of new knowledges and cultural meanings.

Key reading:

Jamison, Andrew (2001) *The Making of Green Knowledge: Environmental Politics and Cultural Transformation*, Cambridge: Cambridge University Press, chapter 3, 'The dialectics of environmentalism' (pp. 71-97).

Further reading:

- Castells, Manuel (1997) *Power of Identity*, Malden, MD: Blackwell. (KDR)
- Eyerman, Ron and Andrew Jamison (1991) *Social Movements: A Cognitive Approach*, Cambridge: Polity Press. (KCDM)
- Hetherington, Kevin (1998) *Expressions of Identity: Space, Performance and the Politics of Identity*, London: Sage. (KDW)
- Jasper, James M. (1997) *The Art of Moral Protest: Culture, Biography, and Creativity in Social Movements*, Chicago: University of Chicago Press. (KCDM)
- Maffesoli, Michel (1996) *The Time of the Tribes: The Decline of Individualism in Mass Society*, London: Sage. (KCR)
- McKay, George (1996) *Senseless Acts of Beauty: Cultures of Resistance Since the Sixties*, London: Verso. (KDNea)
- McKay, George (ed.) (1998) *DIY Culture: Party and Protest in Nineties Britain*, London: Verso. (RAYQea7)
- Melucci, Alberto (1989) *Nomads of the Present: Social Movements and Individual Needs in Contemporary Society*, London: Hutchinson Radius. (KCDM)
- Melucci, Alberto (1996) *Challenging Codes: Collective Action in the Information Age*, Cambridge: Cambridge University Press. (KCDM)
- Seel, Benjamin, Matthew Paterson and Brian Doherty, ed. (2000) *Direct Action in British Environmentalism*, London: Routledge. (DUHN7)
- Taylor, Bron (ed.) *Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism*, New York: State University of N.Y. Press. (DUHB).

7 Nuclear Power

Content

The future of the nuclear industry is once again a hot policy issue, with waste, decommissioning, new build and climate change becoming increasingly urgent agenda items for public policy. In this lecture we examine the reality and rhetoric of the nuclear promise, from its origins in the 1950s and 60s, to the controversies of the 70s and 80s, to more contemporary contexts. Through understanding the nuclear issue in its cultural, institutional and historical contexts we aim to examine key factors shaping the future of the nuclear industry, and the conditions necessary for the industry to become more socially-sensitive, resilient and sustainable. We will be offering insights into the factors which shape the issue, including consideration of how these framings have emerged, and how alternative energy scenarios, such as energy-efficiency and renewables, have been treated in this.

Key reading:

- Grove-White, R., Kearnes, M.B., Macnaghten, P. & Wynne, B. 2006. Nuclear Futures: Assessing Public Attitudes to New Nuclear Power. *Political Quarterly* 77(2): 238-246.

Further reading

- Eurobarometer (2005) *Radioactive Waste, Special Eurobarometer 227/ Wave 63.2*
http://europa.eu.int/comm/public_opinion/archives/ebs/ebs_227_sum_en.pdf
- Flood, M. and Grove-White, R. 1976. *Nuclear Prospects*. London: NCCL
- Robin Grove-White (2000) *Nuclear Waste. No Thanks*. <http://www.nirex.co.uk/news/na01027.htm>
- Tony Hall (1986) *Nuclear Politics: the history of nuclear power in Britain*. Harmondsworth: Penguin

- Alain Touraine (1983) *Anti-Nuclear Protest: The opposition to nuclear power in France*. Cambridge: Cambridge University Press
- UK Government (2003) Energy *White Paper: Our Energy Future- creating a low carbon economy* <http://www.dti.gov.uk/energy/whitepaper/index.shtml>
- William Walker and Mons Loennroth (1983) *Nuclear power struggles: industrial competition and proliferation control*. Allen & Unwin: London
- Ian Welsh (2001) *Mobilising Modernity: The nuclear moment*. Routledge: London
- Brian Wynne, B. (1982) *Rationality and Ritual: the Windscape inquiry and nuclear decisions in Britain*. Chalfont St Giles: British Society for the History of Science
- Brian Wynne, Claire Waterton, and Robin Grove-White (1993) *Public Perceptions and the Nuclear Industry in West Cumbria*. Lancaster: CSEC, Lancaster University

8 *Agricultural Biotechnology*

Content:

Controversies about potential commercialisation of genetically-modified (GM) crops continue to reverberate around Europe. In this session we will explore both the substantive 'risk' issues to which they are argued to give rise, and the wider cultural 'meanings' that have condensed onto GM in the early 21st century. The significance of the rows in the context of wider contemporary 'science-in-society' concerns, under conditions of expanding market liberalism and global free trade, will be discussed, as well as the challenges presented by such issues for Parliamentary democracies.

Key reading:

- David Winickoff, Sheila Jasanoff, Lawrence Busch, Robin Grove-White and Brian Wynne (2005) 'Adjudicating the GM Food Wars: Science, Risk, and Democracy in World Trade Law', *Yale Journal of International Law*, 30:1 81-123.

Further reading:

- AEBC (2001) *Crops on Trial*. London: AEBC <http://www.aebc.gov.uk/aebc/pdf/crops.pdf>
- Guy Cook (2004) *Genetically Modified Language*. London: Routledge
- Gibbs, David (2000) 'Globalisation, the bioscience industry and local environmental responses', *Global Environmental Change*, 10: 245-57 (DG6)
- Goodman, David (2003) 'The Brave New Worlds of Agricultural Technoscience: Changing Perspectives, Recurrent Themes, and New Research Directions in Agro-Food Studies' in *Engineering Trouble: Biotechnology and its Discontents*, edited by Rachel Schurman & Dennis Takahashi Kelso. Berkeley, CA: University of California Press.
- Robin Grove-White (2001) 'New Wine, Old Bottles: Personal Reflections on the New Biotechnology Commissions', *Political Quarterly*, October 2001, pp 466-472. (R6)
- Horlick-Jones, Tom, Walls, John, Rowe, Gene, and Pidgeon, Nick (2007) *The GM Debate: Risk, Politics and Public Engagement*, London: Routledge.
- Jasanoff, Sheila (2005) *Designs on Nature: Science and democracy in Europe and the United States*. Princeton University Press: New Jersey.
- Keller, Evelyn Fox (2000) *The Century of the Gene*, Cambridge, MA: Harvard University Press.
- Kloppenborg, Jack (2004) *First the seed; the political economy of plant biotechnology*, 2d ed., U. of Wisconsin Press. (EYGT)

- Levidow, Les (2001) 'Precautionary Uncertainty: Regulating GM Crops in Europe', *Social Studies of Science* 31/6 842–74
- Levidow, L. and Carr, S. (1997) 'How biotechnology regulation sets a risk/ethics boundary', *Agriculture and Human Values*, 14: 29–43.
- Levidow Les and Marris, Claire (2001) 'Science and governance in Europe: Lessons from the case of agbiotech' *Science and Public Policy* 28 (5): 345-360 (not in library)
- Marris, Claire, Wynne, Brian, Simmons, Peter and Weldon, Sue (2001) *Public Perceptions of Agricultural Biotechnologies in Europe (PABE), Final Report*, Lancaster: CSEC, esp. pages 75-90, <http://csec.lancs.ac.uk/pabe/>
- Toke, Dave (2002) 'Ecological Modernisation and GM Food' *Environmental Politics*, 11(3) pp 145-163.
- Toke, Dave (2004) *The Politics of GM Food: A Comparative Study of the UK, USA and EU*, London: Routledge.
- Wynne, Brian (2001) 'Creating public alienation: expert cultures of risk and ethics on GMOs', *Science as Culture*, Volume 10, Number 4, 2001, 445-481.

9 Sustainable Development

Explores the emergence of the official discourse of sustainable development within contemporary policy and politics and how it is being implemented in local initiatives across the UK. The lecture looks at key debates on the 'value-action' gap in environmental policy, highlighting the tensions between national policies that are based on an information-deficit model of participation, and local research and experience that posits a more complex relationship between individuals and institutions.

Key reading:

Phil Macnaghten and Michael Jacobs 1997. 'Public identification with sustainable development: investigating cultural barriers to participation', *Global Environmental Change*, 7: 1-20

Further reading:

- James Blake (1999) 'Overcoming the "Value-Action Gap" in environmental policy: tensions between national policy and local experience', *Local Environment* 4 (3): 257-278 (DG6)
- Fay Blair and Bob Evans (2004) *Seeing the Bigger Picture: Delivering local sustainable development*. Sustainable Development Commission and the Joseph Rowntree Foundation: York <http://www.jrf.org.uk/bookshop/eBooks/1859351581.pdf>
- Tony Blair (2003) Speech on sustainable development, 24th February 2003, <http://www.number-10.gov.uk/output/Page3073.asp>
- Heather Bulkeley and APJ Mol (2003) Participation and Environmental Governance: Consensus, Ambivalence and Debate, *Environmental Values*, 12: 143–54
- Kate Burningham and Diana Thrush (2001) *Rainforests are a long way from here: the environmental concerns of disadvantaged groups*. Joseph Rowntree Foundation: York
- Jacqui Burgess, Carolyn Harrison and Petra Filius (1998) 'Environmental communication and the cultural politics of environmental citizenship', *Environment and Planning A*, 30: 1445-1460 (U6)
- Littig, B. and Grießler, E., (2005) 'Social sustainability: a catchword between political pragmatism and social theory', *International Journal of Sustainable Development*, Vol. 8: 1/2, 65-79
- Phil Macnaghten, Robin Grove-White, Michael Jacobs and Brian Wynne (1995) *Public Perceptions and Sustainability in Lancashire*. Lancashire County Council, Preston. (DUHNeqd oversize)

document)http://www.lancs.ac.uk/fss/ieppp/staff/docs/lancashire_public_perceptions_reportmacnaghten.pdf

- Phil Macnaghten and John Urry (1998). *Contested Natures*. London: Sage (chapter 7) (DUHN)
- Richard Munton (1997). 'Engaging sustainable development: some observations on progress in the UK', *Progress in Human Geography*, 21: 147-63 (DG6)
- Michael Redclift (1993). 'Sustainable Development: Needs, Values, Rights'. *Environmental Values*, 2, pp. 3-20. (A6)
- Wolfgang Sachs (1999) 'Sustainable development and the crisis of nature: on the political anatomy of an oxymoron', in Hajer, M. and Fisher, F. (eds.) *Living with Nature*. Oxford: Oxford University Press (DUHN7)
- Paul Selman (1998) 'Local agenda 21: substance or spin? *Journal of Environmental Planning and Management*, 41(5): 533-53
- Joe Smith, James Blake, Robin Grove-White, Elham Kashefi, Sarah Madden, and Sue Percy (1998) 'Social learning and sustainable communities: an interim assessment of research into sustainable community projects in the UK', *Local Environment* 4 (2): 195-207 (DG6)

10 Climate Change

Anthropogenic climate change constitutes arguably the biggest single environmental challenge faced by global society. But at the policy level, it is also itself a 'construction' of late C20 science, reflecting distinctive new forms of partnership and mutual reinforcement between science and governments. The levels of uncertainty associated with dominant climate models and their outputs give rise to their own political difficulties for global agreement on appropriate action. The lecture will anatomise and discuss these, through a consideration of climate change science as 'policy science'.

Key reading:

- Simon Shackley and Brian Wynne (1995) 'Global climate change: the mutual construction of an emergent science-policy domain', *Science and Public Policy*, 22: 218-230 (not in library)

Further reading:

- Tony Blair (2004) PM Speech on Climate Change, 14 September 2004 <http://www.number-10.gov.uk/output/Page6333.asp>
- Sonia Boehmer-Christiansen (1995) 'Britain and the Intergovernmental Panel on Climate Change: The impacts of scientific advice on global warming: Integrated policy analysis and the global dimension.' *Environmental Politics*, Vol.4, No. 1, pp.1-18. (R6)
- Sonia Boehmer-Christiansen (1995) 'Britain and the Intergovernmental Panel on Climate Change: The impacts of scientific advice on global warming Part II: The Domestic Story of the British Response to Climate Change, *Environmental Politics*, Vol.4, No.2, Summer 1995, pp.175-196. (R6)
- Clark, N. (2005) 'Ex-orbitant Globality' *Theory, Culture & Society*, vol. 22, no. 5, pp. 165-85.
- David Demerit (2001) 'Nature and Society: The Construction of Global Warming and the Politics of Science', *Annals of the Association of American Geographers*, 91(2): 307-337
- International Panel on Climate Change (2001) *Climate Change 2001: Synthesis Report SPM* [Report for Policy Makers] <http://www.ipcc.ch/> <http://www.ipcc.ch/pub/un/syrenng/spm.pdf>
- Jeremy Leggett (2000) *Carbon Wars: Global warming and the end of the oil era*. Allen Lane

Open Democracy web-based discussion (2005) Politics of Climate Change
http://www.opendemocracy.net/climate_change/ (see discussion articles ▶ [Camilla Toulmin & Saleemul Hug](#) ▶ [Stephan Harrison](#) ▶ [Tom Burke](#) ▶ [Mayer Hillman](#) ▶ [Aubrey Meyer](#))

Steve Rayner, Elizabeth L. Malone (eds) (1998) *Human choice and climate change*, 4 vols, Columbus, Ohio: Battelle Press (DSRO).

J. Timmons Roberts and Bradley Parks (2007) *A Climate Of Injustice: Global Inequality, North-South Politics, and Climate Policy*, Cambridge MA: MIT Press.

Urry, John (2006) 'Cars, Climates and Complex Futures', Dept of Sociology, Lancaster University