Environmental justice in Scotland: policy, pedagogy and praxis

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Abstract

In the first decade of Scottish devolution, environmental justice became a significant component of environmental policy for the Scottish Executive, especially under First Minister Jack McConnell. This paper analyses how a discourse developed within policy narratives which separated environmental justice from economic growth and the interests of capital. In particular, it explores the role which research has played in justifying this discourse. By contrast, an alternative discourse has developed through reflexive and dialogical research associated with the praxis of the environmental organization Friends of the Earth Scotland. This alternative discourse is embedded in the embryonic environmental justice movement in Scotland, and identifies environmental justice as a social conflict which exposes negative externalities at the heart of economic development.

Keywords: environmental justice, discourse, policy, social interests, social movements, Paulo Freire, adult education

1. Context and methodology

Research into environmental justice, particularly in the UK, has tended to focus on distributional patterns of environmental costs and benefits amongst social categories. This paper will argue that environmental justice should be seen more as a discourse embedded in social movement, always provisional and contested, and reflecting interests.

In his analysis of the US environmental justice movement, Harvey (1999) noted that ‘Discourses do not exist in isolation from beliefs, social relations, institutional structures, material practices, or power relations. Discourses internalize effects from all of these domains while reciprocally entering in, though never as pure mirror images, to all of the other moments of the social process’ (Harvey 1999 p 159). Discourses of environmental justice in Scotland have developed in research and policy narratives and they reflect powerful social interests. But such dialogues are also constructed by activists around the communities and social movement with which they identify. A more dynamic understanding of environmental justice emerges from dialogue with activists struggling for what they identify as environmental justice.

This research is based on the decade from 1998 to 2007, during which time the author worked (until July 2005) for Friends of the Earth Scotland (FoES) and as organizer for a course in environmental justice for community activists. Environmental justice became part of a policy discourse amongst Scottish policy makers at this time, when opportunities existed for affecting the power balance between social interests in the newly devolved Scotland. FoES’s role in introducing the concept of environmental justice to the Scottish Executive is widely recognized (FoES 1999, Dunion 2003, Maschewsky 2005, Agyeman 2005). This paper concerns the first two terms of the Scottish parliament with a Labour–Liberal Democrat coalition in the Scottish Executive. The Executive adopted environmental justice as policy, initially with an interpretation close to that of FoES, but subsequently these interpretations diverged. Mainstream policy discourse has increasingly restricted environmental justice to policy areas which do not challenge economic growth. On the basis of FoES’s approach to dialogue with activists, an

1 In 1997 a Labour government was elected to the UK parliament in Westminster with a manifesto pledge in support of devolution in Scotland, Wales and Northern Ireland. Following a referendum and Acts of Parliament, the Scottish Parliament was instituted, devolving most power to this body (the National Assembly for Wales was also instituted at this time). Some powers (e.g., international relations and taxation) were not devolved, however, and remained reserved at Westminster. The government of Scotland is referred to as the Scottish Executive, led by the First Minister. The first two elections produced a Scottish Executive comprising a coalition of Labour and Liberal Democrat parties. The 2007 election delivered a Scottish National Party minority administration which, at the time of writing, has not developed a policy on environmental justice.
alternative discourse can be identified which is broader, and
tends to reflect diverse peripheral communities whose common
interests challenge a purely economistic interpretation of
development.

A range of qualitative methods have been used, including
college observation (as an employee and activist with
FoES); dialogue with grassroots activists in the structured
context of Freirean pedagogy; interviews with civil servants,
NGO staff and other policy makers and stake holders;
analysis of policy documents and research reports; and critical
reflexive interactions between these and with myself as situated
practitioner. Selection of interviewees was constrained by the
inevitable combination of very few people being involved
in the early stages of policy generation, and by many of
these speaking strictly 'off the record'. Some 30 people
have contributed to the author's analysis in different ways,
ranging from more formal semi-structured through less formal
opportunist interviews, to informal discussions in the context
of other meetings.

This multi-method approach is what Denzin and Lincoln
(2005) refer to as 'bricolage', the making of quilts. Baxter
and Eyles (1997) highlight the need for rigour in qualitative
methodology, where the 'use of multiple methods enables
triangulation ... but simply using two or three different
methods does not necessarily guarantee more rigorous
results' (p 508). However for Denzin and Lincoln (2005)
'Triangulation is not a tool or a strategy of validation but
an alternative to validation ... The combination of multiple
methodological practices, empirical materials, perspectives
and observers in a single study is best understood, then, as
a strategy that adds rigor, breadth, complexity, richness, and
depth to any inquiry' (p 5).

Denzin and Lincoln categorize a range of sources of rigour
or validity in qualitative research, based on different theoretical
paradigms (Denzin and Lincoln 2005, p 24). Adopting a
constructivist paradigm, Baxter and Eyles (1997) identify
criteria for validity which include credibility, transferability,
dependability and confirmability. The paradigm adopted
in this research would come under Denzin and Lincoln’s
Cultural Studies and Marxist paradigms, and the criteria for
validity are therefore based on praxis, criticality, social texts,
emancipatory theory and dialectics. It is the argument of this
paper, moreover, that the findings of constructivist research
in Scotland have contributed to a policy discourse inimical
to environmental justice, whereas rigour is achieved by a
process of dialogue with the experience of those affected
by environmental injustices and who struggle, individually and
collectively, against them.

2. Adoption of environmental justice in Scotland

Influenced by the growing international awareness of
environmental justice issues, FoES launched a campaign for
environmental justice to coincide with the inauguration of the
Scottish Parliament in 1999 (FoES 1999).

Unlike the narrative in the US, which focused primarily
on environmental racism, FoES’s initial understanding of
environmental justice sought to link local class-based
environmental maldistributions with global inequalities in
resource consumption. The latter drew on the Sustainable
Europe project, which assessed sustainability gaps in several
European countries by comparing actual resource consumption
with the environmental space (see Carley and Spapens 1998,
McLaren et al 1998, McLaren 2003). The injustice reflected
in the overuse of resources by the minority in the North
at the expense of the global South was connected to local
injustices through the campaign slogan ‘no less than a decent
environment for all, with no more than our fair share of
the earth’s resources’ (FoES 1999). Agyeman (2005) has more
recently classified this approach as ‘Just Sustainability’.

At a local level, Scotland had seen a number of local
campaigns in environmental pollution hotspots, largely in
working class areas, many of which FoES had supported. In
response to these locally based environmental problems, FoES
ran a series of activities aimed at mobilizing and supporting
resistant communities, building capacity and linking them into
the national policy-making process. The issues faced by these
communities were varied and included land fill, open cast
coal mining, gravel quarrying, fish farming, incinerators,
industrial pollution, road building and semiconductor factories
(see Dunion 2003, Dunion and Scandrett 2003, Agents for
Environmental Justice and Scandrett 2003).

In February 2002, Scotland’s First Minister Jack
McConnell gave a speech committing his Executive to
environmental justice (Scottish Executive 2002a. See also
his speech at the World Summit on Sustainable Development,
August 2002 (Scottish Executive 2002b)). His interpretation
of environmental justice included the following attributes:
(1) environmental justice is a form of social justice, involving
both process and outcome (although he gave no substantive
view on what that outcome would be like); (2) it is linked
to traditional concerns of the labour movement and social
democratic politics; (3) it includes both local and international
environmental inequalities (but stops short of recognizing
the connection that the affluence of the developed world has often
been at expense of a historical legacy of colonial exploitation);
(4) it includes resource consumption (i.e., carbon emissions),
environmental damage (e.g., waste landfills) and neglect (litter
and graffiti); (5) it should be combined with ‘economic
progress’.

This policy initiative stimulated a range of activity within
the Scottish Executive’s civil service and non-departmental
public bodies. The focus here is on Executive policy and
commissioned research which illustrates the shifts in the
discourse on environmental justice.

3. Scottish Executive policy on environmental justice

Land-use planning and pollution control are policy areas
most directly affected by environmental justice. At the
time of McConnell’s speech, Scottish Planning Policy 16
(SPP16) on open cast coal was under revision, and subsequently
included strengthened community participation and constraints
on cumulative impact (Scottish Executive 2005a).

Secondly, the Scottish Environment Protection Agency
(SEPA) clarified its statutory responsibility towards environ-
mental justice (Poustie 2004), including strengthening enforce-
ment in disproportionately affected communities. However,
interests of developers, and environmentalists have generally expressed a lack of trust in the system: decisions need to be speeded up. Community groups, and Henkels1998), was introduced into Scotland by FoES (see US when backed up with legal or economic sanctions (Lewis a new development. This initiative has been successful in the agreement', which is a voluntary agreement between a hierarchy of planning applications, removing ‘National’ and ‘Major’ Developments from the remit of the local authority, leaving open the possibility (highlighted in environmentalists’ campaigns) that this could be used to drive through locally or nationally unpopular developments. Moreover, the Act rejects giving objectors (‘third parties’) the right to appeal planning decisions. After sustained campaigning by environmentalists and a reluctant consultation on third-party right of appeal prior to publication of the Bill, respondents were divided more or less exclusively along the lines of business interests against, and community and environmental interests for. The outcome reflects the interests of business.

Whilst environmental justice has been embraced by the Scottish Executive, this has not been permitted to interfere with the high-skill, innovative and entrepreneurial economic development strategies A Smart, Successful Scotland and Framework for Economic Development in Scotland (Scottish Executive 2004a, 2004b). These policies aim at ‘sustainable economic growth’ without acknowledgment of environmental costs. Significantly, Scottish Enterprise was never involved in environmental justice policy, and business groups have not regarded it as a sufficient threat to mount a significant lobby (in comparison with sustainable development policy; see Sklair 2003). Environmental justice policy was not regarded as a threat to the interests of business. In the words of one senior civil servant: ‘Ministers are not going to interfere with the market’.

The area of policy development which has perhaps made the greatest attempt to address both economic development and environmental justice is the Scottish Executive’s policy on sustainable development: Choosing our Future (Scottish Executive 2005c). This document is Scotland’s contribution to the UK framework for sustainable development, One Future–Different Paths (Defra 2005). Choosing our Future essentially brings together a range of Scottish Executive policies with a view to demonstrating how they integrate into a coherent approach to sustainable development. Unlike other national policies, it includes a section on environmental justice, although the phrase does not occur anywhere except in this section. Economic growth is moreover the policy’s ‘top priority—but not at any cost . . . . The challenge is to make economic growth sustainable, breaking the link with environmental damage’ (p 4). Here, clearly, is the legitimation for the policy discourse. By breaking the links, environmental justice becomes a distinct area of policy from economic growth.

This policy division between entrepreneurial growth and more socially equitable interpretations of environmental justice lie at the heart of its progress through policy. Policy which has adopted environmental justice has tended to be outside the economic sphere. Furthermore, it is arguably because the narratives of sustainable economic growth conflict with the valuation of socio-environmental conditions associated with environmental justice that it is possible for diverse local campaigns to identify collectively with an environmental justice ‘movement’ (Martinez-Alier 2003).

4. Scottish Executive commissioned research on environmental justice

Prior to the McConnell speeches little research had been carried out on the distributions of environmental pollution in Scotland, in part because, unlike in England and Wales, Scotland did not have an accessible inventory of polluting facilities. After 2002, the Executive commissioned several
Fairburn et al (2005)’s remit was to identify possible correlations between social deprivation and environmentally damaging land uses or environmental assets. Applying categories meaningful to SEPA’s regulatory responsibilities and land use planning, they used geographical information systems (GISs) to measure degrees of correlation between locations of selected environmental features and indices of deprivation as recorded in the 2001 census. Their findings include the following.

For **industrial pollution**, **derelict land** and **river water** quality there is a strong relationship with deprivation . . . .

For **landfills** and **quarries and opencast sites** the patterns . . . are less distinct. At a national scale there is no evidence to suggest that deprived populations are more likely than others to live near to landfill sites . . . .

People living in deprived areas are less likely to live near to areas of **woodland** . . . .

For **green space** . . . there is no simple relationship.

People living in the most deprived areas are more likely to experience the **poorest air quality** (Fairburn et al (2005) Executive Summary, emphasis in original).

Thus, whilst there is evidence of direct correlation with deprivation in some polluting activities, there is no such evidence with others, including such iconic pollution hotspots as landfills, quarries and opencast sites. This is in part a result of the method of analysis, through categorizing ‘environments’ according to pollution sources (industrial pollution, landfills); enforcement responsibilities (river quality, air quality); or planning categories (green space, woodland). Amongst senior civil servants and politicians, however, this outcome has been interpreted as restricting policy implementation to forms of environmental damage where a correlation can be demonstrated.

Curtice et al (2005) investigated perceptions of environmental justice in deprived communities through interviews, where environmental justice is taken to include both polluting industry and ‘environmental incivilities’. ‘An “environmental incivility” is any aspect of the environment that people are capable of discerning through hearing, sight, touch or smell and about which they may be included to feel negatively’. (Curtice et al (2005) chapter 1, emphasis in original).

Significantly, the study recommends that environmental policy in Scotland needs to give priority to reducing the incidence of street level incivilities and the absence of goods such as lack of green spaces, both of which appear to be more important than potential infrastructural incivilities (Curtice et al (2005) Executive Summary, emphasis added).

In other words, environmental justice policy should be focused onto issues which denigrate local environments in ‘deprived’ areas, i.e., litter, graffiti, dog mess, and vandalism. By focusing on the environmental concerns of people in the poorest areas, the outcome of the research regards major polluters and infrastructure projects (which tend to be driven by economic interests) as less important than low-level incivilities.

Of course, even where major pollution sources are correlated with indices of deprivation, the reverse is seldom true (i.e., most deprived neighbourhoods do not live near to pollution sources). In the absence of an existing pollution source, or where a major industry dominates the community through longevity or provision of employment, then the environmental problems presented by respondents tend to be the ‘incivilities’. Sustained educational work in such contexts can lead the same respondents to a more critical interpretation (for example, Fagan 1998, Scandrett 1999). Moreover, these ‘environmental incivilities’, being directly caused by fellow citizens, are more amenable to policy which does not conflict with business interests, and fit well with other Executive policies on tackling anti-social behaviour in poor areas (such as anti-social behaviour orders).

What is interesting about these two Scottish Executive commissioned reports is that they have enabled the conception of environmental justice espoused by McConnell to be narrowed in favour of certain social interests, especially the interests of capital, even though the process of initiating and commissioning the research, and its execution and methodology, were all rigorous. The reception given to these two pieces of research by policy makers demonstrates a shift in emphasis. Fairburn et al (2005) is treated as a solid piece of background evidence which can be used to close down speculation and narrow the focus of the debate. Because no evidence was identified of correlation between landfill sites and deprivation, or of multiple hot spots across Scotland, so policy should be directed to areas where correlations are identified, such as air quality, and to local solutions. Curtice et al’s research has been received enthusiastically as evidence of an environmental maldistribution which affects the psychosocial health of the most deprived. Moreover, here is an environmental justice problem which can be tackled through existing approaches to local economic development and anti-social behaviour.

Environmental justice research and policy have not addressed communities engaging in a collective struggle against unwanted local polluters. It has also moved away from the economic issue of the companies who cause pollution and the reasons why.

All research embeds interests. The questions which are asked, the methodologies of assessment, and the conventions of interpretation all involve socially embedded choices. This is not to denigrate the research, or to imply that these pieces of research consciously promote an ideological position. On the
contrary, as Wynne (1994) has pointed out, social assumptions are intrinsic to established research principles, and policy is strengthened by submitting these to contestation. As research which falls within a constructivist paradigm (Denzin and Lincoln 2005), this Scottish Executive commissioned research implies an objective reality which can, at some point in time, be sampled by external researchers with at least an approximation of objectivity.

5. Pedagogical generation of knowledge on environmental justice

A contrast may be drawn here between the policy interpretations of research whose empirical data are derived from census/GIS and single-point interviews, and the data derived qualitatively from participant observation and ongoing dialogue with representatives of a collective struggle. Whilst the rigour of the Executive sponsored research can scarcely be faulted, there are inevitable implications of data categorization which has facilitated interests hostile to a strong interpretation of environmental justice. FoES has also revised its interpretations, but in ways that represent a different balance of interests. An alternative discourse emerges from research conducted through a combination of qualitative methods. The discourse described below is the product of the author’s interpretation: it is close to that of FoES, not least because the author was part of generating FoES’s strategy until 2005, but the justification for this discourse lies with the author and not with FoES.

Data are drawn from participant observation, semi-structured and unstructured interviews with key informants, and an ongoing reflexive dialogue with grassroots environmental justice activists through Freirean pedagogical methods. These activists are largely participants in the Higher Education Certificate (HEC) in Environmental Justice, a collaboration, since 2000, between FoES and Queen Margaret University. This two-year part-time course provides sustained support to particular communities facing local environmental problems through intensive education of key activists in these communities.

Activists are recruited by demonstrating the support of a community experiencing environmental injustice. They are community ‘organic intellectuals’ (sensu Gramsci 1971): leaders, mobilizers and opinion formers in the communities with which they identify; and ‘movement intellectuals’ (Eyerman and Jamison 1991) in the sense that they create discourses within the environmental justice movement.

Modelled on the educational philosophy of Freire (1972), the course’s curriculum derives from a dialogue between the specific, local knowledge and experience of the activists facing environmental injustices, and the more general, research-based and analytical knowledge accessible by FoES and the University. Freire argued that the purpose of education for adults is a critical consciousness which enables the oppressed to take liberating action to change their world. Traditional ‘banking’ education treats learners as socially disconnected units to be filled with neutral knowledge by their teacher. By contrast, Freirean education takes seriously the social context and political practice of the learners and creates dialogue between their knowledge and that of the teacher in a collective project of emancipation.

In the HEC Environmental Justice, not only is the capacity to tackle local environmental problems increased, but also knowledge is created in the form of a discourse on environmental justice (Wilkinson and Scandrett 2003, Scandrett et al 2005). In this dialogical epistemology, knowledge is generated in praxis, is constantly provisional and contingent, and is validated not only against the rigours of academic criteria but also accountability to communities engaged in struggle, and their changing collective understanding.

The locus of knowledge generation of the discourse in environmental justice is the communities in which these activists act and the social movement which connects them. Both ‘community’ and ‘social movement’ have stimulated considerable debate in the literature (Shaw 2004, Eyerman and Jamison 1991, Schlosberg 1999). ‘Community’ has been contested, fought over and appropriated for different uses and interests to justify different politics, policies and practices’. (Mayo 1994 p 48), Moreover, Martin (2003) has argued for a more dynamic understanding of community, as the social space between private problems and public issues, where people collectively create identity and shape resistance to the structures which define them. ‘It is in the dialectics of community, understood in this way, that people experience, collectively, the possibilities of agency within the pre-existing constraints of structure’ (Martin 2003).

Moreover, social movements have been described as ‘communities of practice’ (Crowther et al 2006) in which discourses are forged and identity is formed by its participants. Both the negotiation of community and the building of social movement are therefore processes of learning. In this case the (fledgling) environmental justice movement in Scotland can be understood as a community of communities, and the HEC Environmental Justice as a pedagogical contribution to generating the movement’s discourse. The use of community and social movement as a locus for knowledge generation places the struggles for collective self-definition amongst social actors at the heart of the discourse of environmental justice. Participants have identified that their community shares sufficient interests and is affected by a common environmental problem which they have classed (and FoES has accepted) as an environmental injustice.

The movement in Scotland raises some interesting questions about environmental justice discourse. First, not all the participants are deprived, although they are disproportionately from communities which are poor, working class, discriminated against, geographically or culturally isolated or in some other way politically marginalized. The patterns of environmental maldistribution are more complex than simple correlations between poverty and a damaged environment. Movement participants may perceive injustices mediated by various social stratifications.

In Beck’s 1992 ‘risk society’ analysis, collective struggle is no longer characterized by traditional identities such as class. Developing this, Blowers has argued that environmentally damaging land uses tend to be in geographically peripheral
locations which may reflect diverse social categories of peripheralization (Blowers and Leroy 1994). This can lead to resistance movements which cross social factors not peripheralized by the environmental location. This is not to say that class is irrelevant, but that class is mediated by other social factors, often with more geographically segregated distributions. That the poorest live in the worst environment may often be true, but sometimes other social determinants with a more geographical distribution will be more deterministic, in which case resistance may come from diverse class fractions. In the US, environmental racism is only possible because of high levels of de facto racial segregation, thus enabling environmental justice struggles to be defined in civil rights terms (Martinez-Alier 2003). In Scotland, the absence of a correlation between waste landfills and social deprivation is not evidence that no environmental injustice is occurring.

Secondly, participants regard infrastructure and polluting industries as much a significant cause of environmental injustice as environmental problems of poor communities not facing these industries: each group is able to identify its experience as environmental injustice. Where the environmental dysfunction of deprived areas not adjacent to a polluting facility is considered to be an environmental injustice, it is understood not as ‘incivility’—i.e., an activity which one citizen inflicts on another—but as injustice by neglect—for example, poorly maintained public housing or inappropriate transport schemes. The focus is therefore framed in terms of the (ir)responsibility of the state rather than the antisocial behaviour of their fellow residents.

Finally, there is a sense in which the diverse contexts in which they are active are held together by connected valorization of the environment, just as Martinez-Alier (2003) has understood the environmentalism of the poor as a conflict between languages of valuation incommensurate with the economics of the market. Environmental valuation, moreover, is constructed in that interface between the public and private, in the dialectic of community, where cultural values are interpreted by individuals together.

Environmental justice fundamentally conflicts with markets which distribute benefits and costs according to purchasing power. Market distributions reflect the preference of money, not of citizens, and the economic logic of the market seeks to externalize costs including onto the environment (Martinez-Alier 2003). Diverse communities experience the effects of economic environmental externality. These are often, but are not necessarily, the poorest, and they interface with other inequalities which may not be geographically distributed. Whilst drawing primarily on evidence from the global South, Martinez-Alier (2003) argues that environmental justice struggles in the North and environmentalism of the poor in the South, and in history, are common phenomena in the sense that they employ alternative languages of valuation, in conflict with an economic analysis which renders the cost of the environment inadequate to prevent development.

Environmental justice policy formation may be understood as an attempt by the state to absorb the contradiction between the logic of ‘sustained economic growth’ and social conflict over incommensurable valuations. Risking a crisis of legitimation, the state seeks to allocate concessions according to the balance of forces between social interests and their movements (Hay 1994). In Scotland, the space occupied by environmental justice in policy narrative has developed outside the boundaries set by the market economy.

The sources of environmental justice in the economic logic of externalizing costs, and distributing these to the peripheries of different social stratifications, is lost when environmental justice is restricted to correlations with deprivation, or perceptions of the deprived (important though these are). Understanding environmental justice as socially embedded discourses reflecting interests allows a more dynamic interpretation of both state policy and social movement formation.

Environmental injustices are therefore not so much discovered by research (and then responded to by policy makers), as constructed by social processes of which research is part. The question is not which discourse is most valid, in the sense of representing an objective reality, but rather what are the political implications of two discourses, the validity of which can be justified in different ways. What part does it play in social movement as ‘cognitive praxis’ (Eyereman and Jamison 1991)? That is not to resign to relativism, but rather to ground a materialism in a reality which is significant enough for people to mobilize campaigns around.

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References

Agents for Environmental Justice and Scandrett E 2003 Voices from the Grassroots Redressing the Balance Handbook vol 4 (Edinburgh: Friends of the Earth Scotland)

Agyeman J 2005 Sustainable Communities and the Challenge of Environmental Justice (New York: New York University)

Baxter J and Eyles J 1997 Evaluating qualitative research in social geography: establishing ‘rigour’ in interview analysis Trans. Inst. British Geographers, New Series 22 505–25

Beck U 1992 Risk Society (London: Sage)

Blowers A and Leroy P 1994 Power, politics and environmental inequality: a theoretical and empirical analysis of the process of ‘peripheralisation’ Environ. Politics 3 197–229

Carley M and Spapens M 1998 Sharing the World (London: Earthscan)

Charleston P and Kind V 2003 Environmental justice SEPA View 15 http://www.sepa.org.uk/publications/seapview/html/15/environmental_justice.htm accessed 3/10/07

Crowther J, Hemmi A and Scandrett E 2006 E-learning to protest: the role of information and communication technologies Paper Presented to 11th Int. Conf. on Alternative Futures and Popular Protest

Curtice J, Ellaway A, Robertson C, Morris G, Allardice G and Robertson R 2005 Public Attitudes and Environmental Justice

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in Scotland: a Report for the Scottish Executive on Research to Inform the Development and Evaluation of Environmental Justice Policy www.scotland.gov.uk/Publications/2005/10/2791230/12310 accessed 30/1/07

Defra 2005 One Future—Different Paths: The UK's shared Framework for Sustainable Development www.sustainable-development.gov.uk/publications/pdf/SD%20Framework.pdf accessed 18/6/07

Denzin N K and Lincoln Y S 2005 The Sage Handbook of Qualitative Research 3rd edn (London: Sage)

Dunton K 2003 Troublemakers: The Struggle for Environmental Justice in Scotland (Edinburgh: Edinburgh University Press)

Dunton K and Scandrett E 2003 Environmental justice in Scotland as a response to poverty in a northern nation Just Sustainabilities ed J Agyeman, R D Bullard and B Evans (London: Earthscan)

Eyerman R and Jamison A 1991 Social Movements: A Cognitive Approach (Cambridge: Polity Press)

Fagan G 1998 Education and engagement for sustainability Community and Sustainable Development ed D Warburton (London: Earthscan)

Fairburn J, Walker G and Smith G 2005 Investigating environmental justice in Scotland: links between measures of environmental quality and social deprivation SNIFER report UE4/03/01 Edinburgh

FoES 1999 The Campaign for Environmental Justice (Edinburgh: Friends of the Earth Scotland) http://www.foe-scotland.org.uk/nation/ej1.html accessed 18/6/07

FoES 2004 Love Thy Neighbour: the Potential for Good Neighbour Agreements in Scotland (Edinburgh: Friends of the Earth Scotland) www.foe-scotland.org.uk/nation/gna_report.pdf accessed 30/1/07

Freire P 1972 Pedagogy of the Oppressed (London: Penguin)

Gemmell C 2003 Planning for a sustainable future SEPA View 15 www.sepa.org.uk/publications/sepaview/html/15/planning_sustainable_future.htm accessed 30/1/07

Granats A 1997 Selections from the Prison Notebooks (London: Lawrence and Wishan) transl. Q Hoare and G N Smith

Harvey D 1999 The environment of justice Living with Nature: Environmental Politics as Cultural Discourse ed F Fischer and M A Hajer (Oxford: Oxford University Press)

Hay C 1994 Environmental security and state legitimacy Is Capitalism Sustainable? ed M O Connor (New York: Guilford Press)

Lewis S and Henkel's D 1998 Good neighbour agreements: a tool for environmental and social justice Environmental Victims ed C Williams (London: Earthscan)

Martin I 2003 Infections of community in educational work and research 2nd Int. Conf. Experience-Community-Work-based: Researching Learning outside the Academy (Centre for Research in Lifelong Learning CRLl, Glasgow Caledonian University/University of Stirling)

Martinez-Alier J 2003 Environmentalism of the Poor (Basingstoke: Edward Elgar)

Maschewsky W 2005 Environmental justice in Scotland—just words?: a view from outside www.foe-scotland.org.uk/nation/ej1/viewfromoutside.pdf accessed 30/1/07

Mayo M 1994 Communities and Caring: The Mixed Economy of Welfare (London: Macmillan)

McLaren D 2003 Environmental space, equity and the ecological debt Just Sustainabilities: Development in an Unequal World ed J Agyeman, R D Bullard and B Evans (London: Earthscan)

McLaren D, Bullock S and Yousuf N 1998 Tomorrow’s World: Britain’s Share in a Sustainable Future (London: Earthscan)

Poutie M 2004 Environmental Justice in SEPA’s Environmental Protection Activities: a Report for the Scottish Environment Protection Agency (Stirling: SEPA)

Scandrett E 1999 Cultivating knowledge: education, the environment and conflict Popular Education and Social Movements in Scotland Today ed J Crowther, I Martin and M Shaw (Leicester: NIACE)

Scandrett E, O’Leary T and Martinez T 2005 Learning environmental justice through dialogue Proc. PASCAL Conf.: Making Knowledge Work (Leicester: NIACE)

Schlosberg D 1999 Environmental Justice and the New Pluralism: The Challenge of Difference for Environmentalism (Oxford: Oxford University Press)

Scottish Executive 2002a First Minister’s Speech on Environmental Justice www.scotland.gov.uk/News/News-Extras/57 accessed 30/1/07

Scottish Executive 2002b Environmental Justice Speech in South Africa www.scottishexecutive.gov.uk/News/News-Extras/101 accessed 30/1/07

Scottish Executive 2002a A Smart, Successful Scotland: Strategic Direction to the Enterprise Networks and an Enterprise Strategy for Scotland www.scotland.gov.uk/Publications/2004/11/20246/46555 accessed 30/1/07

Scottish Executive 2004b Framework for Economic Development in Scotland www.scotland.gov.uk/Publications/2004/09/19872/42430 accessed 18/6/07

Scottish Executive 2005a Scottish Planning Policy: SPP16: Opencast Coal www.scotland.gov.uk/Publications/2005/07/13111617/16198 accessed 30/1/07

Scottish Executive 2005b Review of Progress on Environmental Justice www.scotland.gov.uk/Publications/2005/12/12161827/18283 accessed 30/1/07

Scottish Executive 2005c Choosing our future: Scotland’s sustainable development strategy www.scotland.gov.uk/Publications/2005/12/14939/39032 accessed 18/6/07

Scottish Parliament 2006 The Planning etc (Scotland) Act www.opsi.gov.uk/legislation/scotland/acts2006/asp_20060017%20c.pdf accessed 18/6/07

Shaw M 2004 Community Work: Policy, Politics and Practice (Edinburgh: Universities of Hull) Monograph

Skilair L 2003 The Transnational Capitalist Class (Oxford: Oxford University Press)

Wilkinson M and Scandrett E 2003 A popular education approach to tackling environmental injustice and widening participation Concept (Ed) 13 (1/2) 11–16

Wynne B 1994 Scientific knowledge and the global environment Social Theory and the Global Environment ed M Redclift and T Benton (London: Routledge)