

The diverse and contested meanings of sustainable development

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We provide a heuristic framework that can be used as a lens for understanding the arguments being presented in the papers which comprise this special issue on sustainable development and environmental issues in Great Britain. This framework can also be used as an introduction to the wider literature on sustainable development because it is designed to bring greater clarity to this large, diverse and rapidly expanding field of enquiry populated by heterogeneous discourses, multiple approaches and a variety of recommendations as to the ways forward.

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Introduction

This special issue is in some ways a new venture for the *Geographical Journal*. It introduces readers to discourses that have been seldom raised between the covers of the journal, and certainly not as a special issue. That is, a collection of contemporary debates on the environment and development in the United Kingdom – though, of course, the journal has long pursued environment and development debates in the developing world. Yet it is our belief as guest editors that unless the diverse and contested meanings of what constitutes sustainable development is opened up to reveal the host of alternative possibilities and futures, then the policy community (and those that research it or are generally interested in it) may remain somewhat blinkered in terms of the breadth and depth of not only their thinking but also, more importantly, the suite of policy responses to crucial issues.

The aim of this introductory paper to this special issue is then to provide an overview of the diverse meanings of sustainable development, not least in order to situate the other papers contained within this issue. By providing a heuristic framework that readers might wish to use as a lens for understanding not only the arguments being presented in the papers in this issue but also for getting to grips with

the wider literature on sustainable development, our intention is to try to bring greater clarity to what is a large, diverse and rapidly expanding field of enquiry populated by heterogeneous discourses, multiple approaches and a variety of recommendations as to the ways forward. Rather than leaving readers confronted by what appear to be diverse, often competing and frequently opposing views concerning the meaning and practice of sustainable development, our desire is to bring some order to what might otherwise appear a messy, chaotic and disordered subject. If in so doing we help readers to understand both where the various papers in this issue are situated in the overarching debates taking place on sustainable development and come to understand some of the broader rifts and divisions in this dynamic and diverse field of enquiry, then we will have achieved our objective.

The meanings of sustainable development

Sustainable development is a notoriously difficult, slippery and elusive concept to pin down. Indeed, Fowke and Prasad (1996) have identified at least 80 different, often competing and sometimes contradictory, definitions. The best known, however, is that given in the Brundtland Report (published by the intergovernmental commission set up by the UN system in the mid-1980s under the chair of

Gro Harlan Brundtland to report on environmental issues), where it is suggested that sustainable development means 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987, 8 and 43). Yet this definition of sustainable development is allied to a particular developmental worldview that is resisted and contested by many commentators.

To begin to get to grips with the range of diverse and contested meanings of sustainable development, it is first of all necessary to recognize that the starting point of much of the sustainable development literature, albeit more often implicit than explicit, is what we here call the 'environmental paradox'. For nearly all commentators on sustainable development, this means there is a mismatch between what is demanded of the Earth and what the Earth is capable of supplying (see Cahill 2001; Cahill and Fitzpatrick 2001; Fitzpatrick and Cahill 2002; Goodin 1992). For those who recognize this and thus devote themselves to considering how sustainable development can be achieved, what is seen to be required is either a reduction in societal demands on the Earth and/or an increase in the resources so that the gap between supply and demand can, at least, be bridged to some extent. Indeed, it is this process of gradually conjoining demands on and supply of resources – the infinite and finite aspects of human life – that defines what is meant by the process of sustainable development.

How, therefore, can demands and resources be made to conjoin? It is this question, or more precisely the answers to this question, that produce the diverse and contested meanings of sustainable development. This is because the question of how to conjoin demands and resources can be answered in a number of different ways. The first broad way of answering this question (sometimes known as 'weak sustainability' or 'shallow environmentalism') is to argue that one needs to expand the stock of resources. This can be done by developing renewable resources, creating substitutes for non-renewable resources, making more effective use of existing resources, and/or by searching for technological solutions to problems such as resource depletion and pollution.

A second way of answering the question (known as 'strong sustainability' or 'deep ecology') is to argue that the demands that we make on the Earth need to be revised so that, for instance, we consume less. In this view, in consequence, rather than adapt the Earth to suit ourselves, we adapt ourselves to meet the finitude of nature. A third way ('moderate sustainability') combines elements of the weak and strong approaches – the two core schools of thought in sustainability science. It seeks

to both expand the stock of resources and reduce demands on this stock in order to conjoin resources and demands. What rapidly becomes apparent is that a continuum of environmental thought exists with, at the one end, commentators who seek to alter the resource side of the equation and, at the other end, those who focus upon changing the demand side. Here, and for the sake of simplicity, we briefly introduce these two core schools of thought regarding what it means to pursue sustainable development, always recognizing that this is in reality a spectrum of thinking rather than an either/or dualism. Indeed, for precisely this reason, we refer to these perspectives as 'weaker' and 'stronger' (rather than 'weak' and 'strong') sustainable development.

Weaker sustainable development

In this view, there is seen to be no need to transform either the predominant narrative on nature or the existing dominant discourse on what constitutes economic progress and development. Nature is predominantly seen as a resource to which we have a right of dominion and there is a belief that economic growth is a valid measure of 'progress' (O'Riordan 1996).

Weaker sustainable development, therefore, adopts an anthropocentric (human-centred) discourse on the relationship between people and nature. This is composed of three strands: the perception that people are separate from nature; the idea that nature is a 'resource' to be used for the benefit of society or individuals; and the view that we have the right to dominate nature. Taken together, these three strands represent what might be considered a Judaeo-Christian conceptualization of the connection between people and nature. As Genesis (chapter 1, verse 28) states, 'be fruitful and multiply and replenish the earth and subdue it; and have dominion over the fish of the sea, and over the fowl of the air and over every living thing that moveth upon the earth'. Although of course this is open to various interpretations, the dominant Judaeo-Christian reading has been that human beings are separate from nature and that nature is a resource to be exploited by and for people. It reads humankind as the sole source of value and nature merely as a raw material to be manipulated for the purposes of people. Weaker sustainable development, in consequence, fails to contest such core values concerning dominant attitudes towards nature. The intention is instead quite simply to understand nature so that it can be controlled and managed for the benefit of people.

At the heart of weaker sustainable development is an implicit optimism. There is a confidence that people will be able to find a solution to any

environmental problems that arise. They will be able to enhance the stock of 'resources'. Technological progress, it is assumed, will enable people to manipulate the Earth to meet their enormous demands on it. Any problems that arise will thus be solved through technological development. In this view, therefore, there is an acceptance that the trajectory of economic development and people's demands do not need to change and it is optimistic about the aptitude of humankind to solve any problems that may arise concerning resource depletion. Faith is placed in scientific and technological expertise. The scientists in their white lab coats and engineers in safety helmets will bridge the gap between demand and resources by manipulating the resource stock to meet societies' needs.

However, weaker and stronger sustainability is a spectrum of contrasting perspectives rather than an either/or dualism. In consequence, what one finds in practice is a gradation of thought amongst weaker sustainability theorists. Although what defines them as weak sustainability theorists is the fact that they see no need to change fundamentally what is meant by progress and economic development, there is a spectrum of stances that to differing degrees seeks concessions towards environmental protection. Rather than solely believing that ill (economic, social and environmental) effects of undiluted capitalism have to be resolved using the creativity of society in general, the logic of prevention rather than cure is also frequently understood. Advocates of weaker sustainable development, in consequence, often argue that capitalism must better accommodate environmental concerns. They thus advocate developments such as the provision of environmental management agencies, more efficient use of resources, better project appraisal techniques to assess the environmental impacts of proposals, and economic adjustments to take into account environmental costs. French (2004), in examining how coastal zone management in Britain has evolved, and Hulme and Turnpenny (2004), in analysing climate change policy in the UK, both show that even though environmental agencies have evolved and their policies have changed, they essentially have remained (and we can predict will remain so in the near future) under the influence of weaker sustainability theorists. The overarching belief of such theorists, nevertheless, is that economic growth and resource exploitation can continue. What is required is a better accommodation of environmental issues, with the extent to which they need to be accommodated varying to different degrees amongst such commentators.

Indeed, two increasingly popular stances within the weaker sustainable development literature are, first of all, that it is possible to improve the

efficiency of economic growth so that it uses fewer natural resources and, secondly, that economic growth can continue but there is a need to redistribute the costs and benefits in a more equitable manner. The first idea is sometimes referred to as 'ecological modernization' (e.g. Mol 1999; Mol and Sommerfield 2000). In this special issue, one of the leading international exponents of this approach, Peter Roberts, argues that it is not only possible to improve the efficiency of economic growth through sustainable waste practices, but also that such environmental practices can themselves become a driver of economic growth (Roberts 2004). The second stance, that economic growth can continue but there is a need to redistribute the costs and benefits more equally on either an intra- and/or inter-generational level, has become known as 'environmental justice'. Again, two prominent international exponents of this approach, Agyeman and Evans (2004), comprehensively review the 'environmental justice' literature and, in doing so, highlight the influence of the US environmental justice movement on the emerging UK discourse on 'just sustainability'.

Until now, however, it would be fair to say that those pursuing the 'environmental justice' or the 'just sustainability' approach have tended to focus heavily upon the relationships between socio-economic disparities and the environment. Interestingly for geographers, much less emphasis in this contemporary literature tends to have been placed on the geographical disparities. We open up this avenue of debate in this issue through the paper by Haughton and Counsell (2004), who provide a lucid and well-considered account of precisely this issue by examining how different geographies have harnessed the term sustainable development to justify different approaches to, and outcomes of, regional planning.

Common to all of these approaches, nevertheless, are many of the core tenets of weak sustainability:

- a human-centred worldview is adopted;
- there is an emphasis on a growth-oriented approach to economic development;
- there is a relative lack of consideration given to the need for radical change in people's demands on the Earth; and
- there is a perpetuation of the view that nature is merely a collection of natural resources that can be subdued by the human race.

Stronger sustainable development

Unlike the range of perspectives on the 'weaker' side of the sustainable development spectrum that focus on the resource-side of the equation so as to

conjoin resources and demands, commentators on the 'stronger' side of the spectrum focus upon changing the demands made on the Earth. The common belief linking together stronger sustainability theorists is the view of the Earth as finite and their conceding that no habitable future is possible unless the demand-side of the equation radically alters by rethinking our attitude towards nature as well as our view of economic progress and 'development' (e.g. Capra and Spretnak 1985; Dobson 1993; Ekins and Max-Neef 1992; Fodor 1999; Goldsmith *et al.* 1995; Henderson 1999; Hoogendijk 1993; Mander and Goldsmith 1996; McBurney 1990; Robertson 1998; Roseland 1998; Trainer 1996; Warburton 1998; Wright 1997). For these analysts, the 'weaker' versions of sustainable development discussed above are much more about 'sustaining development' rather than sustaining environment, nature, ecosystems or the Earth's life support systems.

In consequence, in the stronger version of sustainable development, a very different view of the relationship between people and nature is adopted. The objective is again to protect natural ecosystems but not simply for the pleasure of people, as is so often the case in anthropocentrism. Instead, the argument of strong sustainability theorists is that nature has biotic rights (e.g. Devall 1990; Devall and Sessions 1985; Naess 1986 1989; Skolimowski 1981). Nature is seen to have a right to remain unmolested that does not require justification in human terms – just as there are inalienable 'human rights' that require no justification. For example, stronger sustainability theorists assert that nature has similar rights that do not need to be justified in terms of their benefits to humankind. The problem for deep ecologists (or what are sometimes called 'ecocentrists'; O'Riordan 1996) is that these biotic rights are not currently being respected. Writers such as Zimmerman thus call for 'the elimination of the anthropocentric world view that portrays humanity itself as the source of all value and that depicts nature solely as raw material for human purposes' (1987, 22). In strong sustainability, in consequence, anthropocentrism is replaced by biocentric egalitarianism, by which is meant inter-species equity that recognizes non-human or biotic rights (Eckersley 1992).

Grounded in this refiguring of nature, the stronger sustainability approach then proceeds to develop its critique of economic development and progress. For these writers, human society – in its endless pursuit of materialism – is heading in the wrong direction. Their argument is that what were originally means to an end have become ends in themselves. For example, the acquisition of material goods was originally a means to achieving

the end of well-being. Today, they argue, such a means has become an end in itself (e.g. Dobson 1993; Mander and Goldsmith 1996; Robertson 1985 1991). They thus call for radical change. For them, there is a need to redefine 'wealth' as 'well-being' rather than the acquisition of material goods. In so doing, they mirror Aristotle's critique of moneymaking (chrematistics). Aristotle viewed the point of economic activity as enabling people to live well, which involved having sufficient time to spend developing friendships and the arts, and participating in political deliberation. For this, production was directed towards use-values, and it was necessary to have some idea of sufficiency in material consumption. He saw economic activity directed towards moneymaking as pathological, as mistaking the means of achieving economic well-being for the ends (see Sayer 2001). Aristotle, of course, could not have envisaged that what for him was an aberration was to become a system imperative.

In order to achieve such 'well-being' for humans and non-humans, stronger sustainable development commentators thus assert that there is a need to change the demands made on the Earth. For them, the common strategy advocated is a more small-scale decentralized way of life based upon greater self-reliance, so as to create a social and economic system less destructive towards nature (e.g. Douthwaite 1996; Ekins and Max-Neef 1992; Gass 1996; Goldsmith *et al.* 1995; Henderson 1999; Lipietz 1995; Mander and Goldsmith 1996; McBurney 1990; Morehouse 1997; Robertson 1985; Roseland 1998; Trainer 1996). Rather than pursue the end of economic growth through outward-looking strategies, their objective is to ensure that the basic needs and desires of all are met through the pursuit of self-reliance and an inward-looking approach (e.g. Ekins and Max-Neef 1992; Robertson 1981 1985; Morehouse 1997).

Today, in the sustainable development literature, the stronger sustainability stance is less prominent than it was in the earlier days of the environmental movement. This is not to say, however, that the core values of this stance have been usurped by the weaker sustainability position. Indeed, it is precisely many of the values that underpin stronger sustainability that appear to be the key drivers behind many of the contemporary arguments and policy initiatives being adopted, even if they are less prominently and explicitly exhibited than in the past.

An example that this might be the case is to be found in the paper by Susan Buckingham (2004). As she shows, the origins of ecofeminism are very much rooted in the core values of deep ecology. Indeed, the only thing that differentiates ecofeminism

from the stronger sustainability is that it has gone deeper than deep ecology. Ecofeminism has argued that it is not just human-centredness (anthropocentrism) that engenders the environmental problem, but rather male-centredness (androcentrism). For ecofeminists, in other words, a link has been made between men's domination of nature and men's domination of women, in that it has been argued that the master-slave role that marks man's association with nature is reiterated in man's relationship with women (Daly 1979; Easlie 1981; King 1983; Merchant 1980). As Buckingham points out in her eloquent review of the emergence and evolution of this strand of environmental thought, not only has the essentialist sub-strand of ecofeminism, which viewed women as having a particular relationship with nature by virtue of their biology, slowly but surely been replaced by a constructivist approach, but ecofeminist thought can be seen to underpin many of the more mainstream contemporary initiatives in the field of sustainable development that have sought to display much greater gender sensitivity. What might superficially be interpreted as the expanding out of the weaker sustainability 'environmental justice' approach to incorporate the dimension of gender can thus also be interpreted as evidence of the influence of ecofeminism on mainstream sustainable development thought.

Conclusions

Some of the most exciting developments in geography have always occurred when ideas that were before treated as entirely separate spheres of enquiry start to be discussed in relation to each other. Indeed, many of the papers in this special issue display how this has been done in the recent past and the outcomes, notably the way in which environmentalism and feminism have been conjoined through 'ecofeminism' (Buckingham 2004), the concerns with social exclusion and sustainable development through 'just sustainability' and 'environmental justice' (Agyeman and Evans 2004), the concerns with regional and local economic development and sustainability (Haughton and Counsell 2004; Roberts 2004), and the ways in which agencies and policies change while remaining rooted in the same theoretical soil (French 2004; Hulme and Turnpenny 2004).

Indeed, it is perhaps the creation of new interfaces between sustainable development and topics that have so far not been conjoined with it that will provide some of the most exciting future developments in this subject area. One notable example might be the conjoining of the current emergence of 'post-development' theory in both its Third and Western World applications (Escobar 1995;

Gibson-Graham and Ruccio 2001) with the issue of sustainable 'development'. Both, after all, share many similar concerns about how 'development' is represented and the need to engage in the demonstrable construction of alternative possibilities and futures, and there is much to be learned on both sides from the techniques that are being used to refigure the meaning of 'development'.

What makes this issue of 'sustainable development' so exciting, however, is not the opportunities it offers for new interfaces and ideas, but that it is the subject that has always had, and will continue to possess, the potential to unite geography and geographers. If it were some minor backwater of only marginal interest, then perhaps the reluctance of some geographers to get involved would be understandable. But given that sustainable development is a discussion about the future of the Earth and its inhabitants, and that geography is a natural breeding ground for many of the core issues to be explored, it would be nothing less than foolish for the geography community to not take on the mantle of the 'holistic' science that is most capable of dealing with this issue. We hope you enjoy the papers that follow and that they stimulate your interests.

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