

Green Economics: Theoretical Roots

Molly Scott Cato

‘it is inherent in the methodology of economics to ignore man’s dependence on the natural world’.

E. F. Schumacher

Over the past three years or so the issue of climate change has moved from a peripheral concern of scientists and environmentalists to being a central issue in global policy-making. It was this realisation that the way our economy operates is causing pollution on a scale that threatens not only our well-being but our very survival that first motivated the development of a green approach to the economy. Concerns about the future of an economy which is entirely dependent on oil in an era when we are moving towards the decline of oil supplies and increased competition for those which remain have drawn attention to the importance of a consideration of resources once we recognise their limitations. This was the other motivation for the development of green economics. In addition, greens have been concerned about the way an economic system based on competition has led to widening inequalities between rich and poor on a global as well as a local scale, and the inevitable tension and conflict this inequality generates.

Finally, these three issues are reaching the mainstream of political debate. Politicians appear to have been caught on the hop and their responses seem both half-hearted and inadequate. In this context, the insights of green economics, which has been developing policy based in a recognition of planetary limits and the importance of using resources wisely and justly for 30 years, are of crucial importance. This paper is by way of an introduction to the sub-discipline of green economics, offering an introduction to the main theorists and central themes: the need to replace economic growth with ecological balance; the importance of sharing the planet’s resources wisely and fairly; the key concern with scale; and the importance of re-introducing multiple perspectives into our consideration of economics.

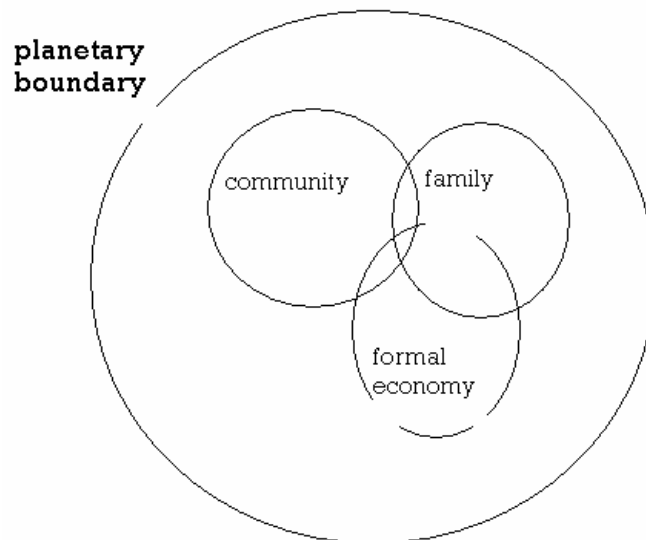
Ecological Balance rather than Economic Growth

The lesson of ecology is that, as species of the planet, we are all connected in a web of life. Ecology is defined as ‘the scientific study of the interrelationships among organisms and between organisms, and between them and all aspects, living and non-living, of their environment’ (Allaby, 1998). At a conference on the theme of land in 1999, Robin Harper, the Green Party’s first Scottish MP said ‘We need to move towards the idea of ecological development: the economy should be seen as a subset of the ecosystem, not the other way around.’ The first lesson that green economics draws from ecology is that we cannot please ourselves without considering the consequences of what we are doing for the rest of our eco-system. The other lesson is about adapting to the environment we find ourselves in, rather than trying to force the environment to adapt to us. It is a sense that forcing the planet as a whole to accept an impossibly high burden because of our excessive consumption is creating climate change that is making the lessons of ecology increasingly pressing.

The figure illustrates how green economics views the formal economy as embedded within a system of social structures and only a very small part of economic activity. This is in contrast to mainstream economics, which sees the environment as a possession of the economy, to be exploited at will. All these interacting social and

economic systems are enclosed within the planet, which is itself a closed system. It is when we fail to recognise these complex interrelations that the natural balance that exists in nature is disrupted and we create problems such as desertification or pathogenic pollution.

Figure 1. Economics for a Small Planet



It is this need to recognize planetary limits that has made the ending of economic growth a key tenet of green economics. The classic green critique of the concept of growth is *The Growth Illusion* (1992), where Douthwaite makes the point that, just as ecology suggests, excessive growth creates feedback systems that undermine the quality of life that we were seeking to enhance and is hence self-defeating. In a later paper he argues that there are different kinds of growth and lists conditions that economic activity should meet for it to be considered 'good growth'. These include economic activity that does not rely on increased use of energy or raw materials and transport, and has a neutral impact on waste production and pollution (Douthwaite, 1999).

Ekins (2000) contextualises such concerns and distinguishes between four types of economic growth, as summarised in Figure 2. We can see clearly from the figure that, historically, the economy has relied heavily on Type-1 growth, demanding more from the planet to generate higher levels of consumption and return on investment. In the debate over climate change the emphasis has shifted to Type 2 growth, relying on ingenuity to overcome the negative consequences of increased production and consumption. Ekins is keen to point out the sceptical response from many to this suggestion that technology can guarantee business as usual, emphasising again the difficulty of circumventing the second law of thermodynamics. Type 3 growth, in human welfare, is often more apparent than real, since for example, a new 4x4 vehicle may generate immediate well-being but only at the cost of later environmental destruction. Moreover, it is frequently achieved at the cost of other generations, other species or the planet itself. Type 4 growth is the type that green economists have no argument with since it represents the natural ability of the planet to regenerate itself. Again, remembering the importance of living in balance with nature, such growth can be beneficial, for example the use of

biomass to generate fuels, when the carbon dioxide produced in burning can be reabsorbed by the next round of tree growth.

Figure 2. Ekins’s typology of economic growth and consequent environmental problems

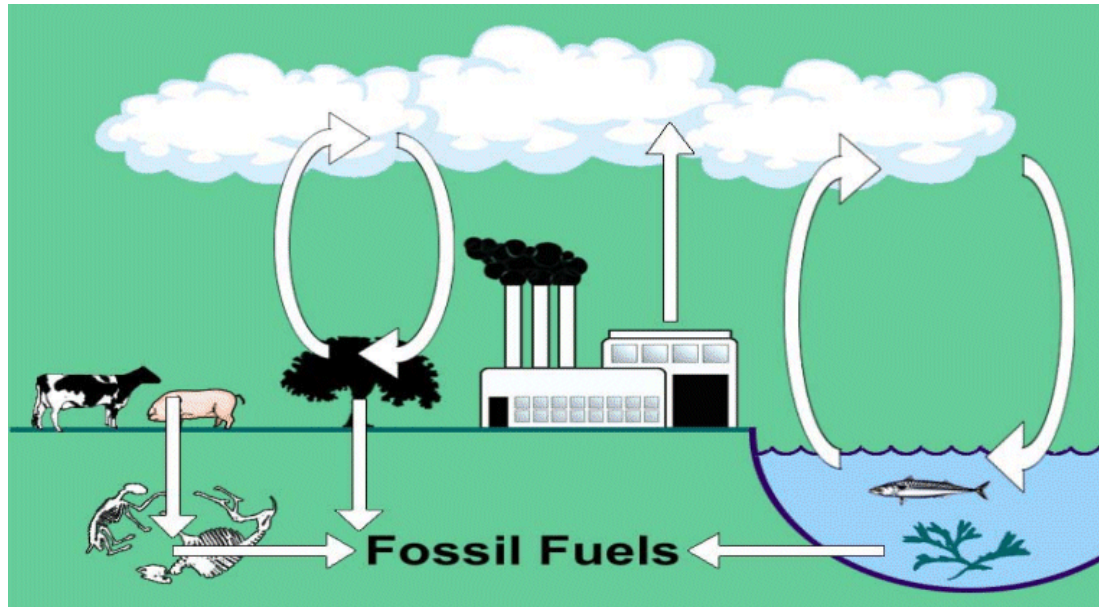
Type of growth	Environmental problem	Green economists’ verdict
Growth of the economy’s biophysical throughput (Type 1)	Increases entropy manifest as growth in waste and pollution	Detrimental
Growth of production (Type 2)	Tends to rely on type I growth or technological advance	Suspicion
Growth of economic welfare (Type 3)	Can be limited by negative environmental externalities and unequal distribution	Approval in theory; scepticism in practice
Environmental growth through increase in ecological capital (regeneration) (Type 4)	None, because nature manages to circumvent the second law of thermodynamics and decrease biospheric entropy	Approval, subject to genuine respect for natural cycles and biodiversity

The problems with interfering with the ecological balance of the planet are best illustrated by the problem of climate change, which is a result of the disruption of the planet’s carbon cycle (illustrated as Figure 3):

The movement of carbon through the surface, interior, and atmosphere of the Earth. . . . The major movement of carbon results from photosynthesis and respiration, with exchange between the biosphere, atmosphere, and hydrosphere. . . . The burning of fossil fuels and the release of CO₂ from soil air through the clearance of tropical forests may eventually change the balance of the carbon cycle. (Allaby, 1998: 70).

From the perspective of green economics the important point is that there are three main systems producing greenhouse gases that are part of our broad economic activities—the growth and decay cycle of living organisms, our interaction with the land via agriculture, and our use of fossil fuels. Of these it is the third that is mainly causing the breakdown in the natural system. Any economic activity that adds to the downwards arrows by absorbing carbon dioxide (such as planting trees) or reduces the size of the upwards arrows by reducing the emissions of carbon dioxide (such as switching from fossil-fuel intensive agriculture to organic agriculture) in the figure is in a sector that is bound to grow in the future.

Figure 3. The Carbon Cycle



Source: Reproduced with permission from Environmental Practice at Work www.epaw.co.uk

Sharing Rather than Exploiting Resources

Economics is often defined as the study of how scarce resources are or should be allocated. The recognition of the limitations of the earth's resources necessarily accentuates the issue of how those limited resources are shared, so one would expect concerns with equity to feature prominently in green economics. However, in a discussion of green political economy Barry (2006) writes that 'the argument for lessening socio-economic inequality and redistributive policies to do this have not been as prominent within green political economy and models of sustainable development as they perhaps should be'. However a critical account of globalisation by two prominent members of the UK Green Party challenged globalisation specifically on the basis of its inability to reduce inequality:

Measures of absolute poverty also reveal a grim picture. Of the world's 6 billion people, 2.8 billion—almost half—live on less than \$2 a day, and more than 1.2 billion—a fifth—live on less than \$1 a day, with numbers having increased during the 1990s in most regions of the world apart from India and China. (Woodin and Lucas, 2004: 48).

Green economists would share the critique of globalisation produced by Peter Singer (2002) where he suggests that globalization 'takes from the poor and gives to the rich'.

At the level of policy, concern has also been expressed by both green and environmental economists about the possible regressive consequences of a range of green taxes (see Turner *et al.*, 1996; Brannlund, and Gren, 1999); and regimes devised and tested before the introduction of such taxes to ensure that they would be fiscally advantageous to those in the lowest income groups (Dresner and Ekins, 2004). One study found that 'poor households already pay substantially more per unit of energy than rich households' and proposed a scheme that 'would effectively abolish fuel poverty, could achieve carbon savings of four million tonnes of carbon (mtC) over ten years and

save households nearly £20 billion net present value' (Dresner and Ekins, 2004). Other green policies, particularly the introduction of a Citizens' Income, would clearly operate to support the incomes of the poorest in society (Lord, 2003).

It is clear that green economics exists in opposition to neoliberal economics and finds itself comfortably at home in the setting of a heterodox economics conference. It has more trouble in defining its position in relation to capitalism. In spite of its implicit rejection of the central tenets of a capitalist economy—namely the exploitation of people and resources to maximize profit and the extraction of surplus value—many greens feel uncomfortable with identifying with an explicitly anti-capitalist position, preferring slogans such as that of Die Grüne: 'Not right, not left, but ahead' (for more detail on this uncomfortable relationship see Cato, 2004a). However, the work of ecofeminists such as Mellor (1995) and Plumwood has accentuated the importance of a complete rethinking of economic structures as necessary to the protection of the planet from economic exploitation. Plumwood writes that 'a real deep ecology must rethink private property' (2002: 217), and that 'Inequality, whether inside the nation or out of it, is a major sponsor of ecological irrationality and remoteness'.

The situation is complicated by the fact that a green lifestyle, including such items as hybrid vehicles and organic food, is significantly more expensive than a conventional lifestyle. For many greens their practical response to the environmental crisis that they recognize around them has been to buy a green lifestyle off the shelf, what Plumwood (2002) refers to as 'deep pocket ecology' because it is only available to those with the income to support this choice. Those with larger bank balances can also insulate themselves from the worst effects 'a range of environmental ills': 'some considerable degree of redistribution and remoteness from consequences is possible along lines of social privilege' (Plumwood, 2002: 85).

As a corollary to this argument about the ability to use money to remove oneself from the consequences of environmental crisis other green economists draw attention to the fact that a good lifestyle is itself a concept that can be unpacked. Cato (2004b) links the definition of relative poverty and the harmful cycle of economic growth, suggesting that advertising is used to create a range of new 'needs' which the economy must then expand to fulfil, thus depriving us of the ability to set our own standard as to what our requirements are. Although this may increase our material wherewithal it adds to the extent of our unmet needs, both individually and as a society, and increases dissatisfaction. We are more dissatisfied than our primitive ancestors, whose societies have been described as the original affluent societies and whose approach to production and exchange is described by Sahlins (1972:2) in terms of 'stone age economics':

There are two possible courses to affluence. Wants may be 'easily satisfied' either by producing much or desiring little. The familiar conception, the Galbraithian way, makes assumptions peculiarly appropriate to market economies: that man's wants are great, not to say infinite, whereas his means are limited, although improvable: thus, the gap between means and ends can be narrowed by industrial productivity, at least to the point that 'urgent goods' become plentiful. But there is also a Zen road to affluence, departing from premises somewhat different from our own: that human material wants are finite and few, and technical means unchanging but on the whole adequate. Adopting the Zen strategy, a people can enjoy an unparalleled material plenty—with a low standard of living.

Equity concerns must be central to green economics, since the recognition of the limitation of the planet's resources, the establishment of the ultimate consumption frontier, makes questions of distribution immediately more pressing. It also makes the link between the need to consider distributional issues and the need to use the resources that are available wisely. In a green economy, according to Pepper: 'Alternatives to

present forms of production would be planned on the principle that private profit is unimportant compared with social and environmental justice and well-being'. (Pepper, 1984: 197). Perhaps the most resounding restatement of this principle is in the recognition of the limitation of planetary resources and the concomitant prerogative to be strategic when deploying them. Schumacher makes this point by using the popular metaphor of the spaceship earth:

A businessman would not consider a firm to have solved its problem of production and to have achieved viability if he saw that it was rapidly consuming its capital. How, then, could we overlook this vital fact when it comes to that very big firm, the economy of Spaceship Earth and, in particular, the economies of its rich passengers? (Schumacher, 1973: 12).

Economics is primarily about resources. Heterodox economics considers the issue of the exploitation of resources as unproblematic and that of their fair distribution as a marginal concern. By contrast, green economics places these issues at the centre of its discussion.

Human Scale

The concern with scale is evident in green economics, whose most famous adage is probably 'small is beautiful'. Schumacher (1973) describes three driving beliefs that he was brought up with which incline towards the development of larger units: the union of states; the mental association of largeness with greater prosperity; and the importance of 'economies of scale' to productive efficiency. He challenges this tendency and suggests that its assumptions should be questioned by asking 'what scale is appropriate'. Amongst green economists there is no slavish adherence to smaller units, rather the preference is for appropriate scale, i.e. organizing business at the level which is best suited to serve the needs of producers, consumers and the environment. According to Schumacher, 'For every activity there is a certain appropriate scale, and the more active and intimate the activity, the smaller the number of people that can take part'. (Schumacher, 1973: 64).

In fact, the phrase 'small is beautiful' was coined not by Schumacher but by his colleague and mentor Leopold Kohr. Kohr had some views that would certainly not find a place in the green economics, but his concern that the ever-increasing size of political and economic units was threatening to the natural order of things and to human well-being informed many later theorists in this field. In his *Breakdown of Nations* (1957: 86) he wrote that:

This means that smallness is not an accidental whim of creation. It fulfils a most profound purpose. It is the basis of stability and duration, of a graceful harmonious existence that needs no master.

Green economists have taken the ideas of Schumacher forward to argue that, while a market economy may generate higher levels of output it will not operate at the appropriate scale to exist in balance with its environment. According to Daly and Cobb (1990: 368), 'Environmental degradation must be shown to result from the scale of the economy in general, rather than only from allocative mistakes that can be corrected while throughput continues to grow exponentially'. This understanding is diametrically opposed to the neoclassical concept of 'economies of scale', which according to green political economists must be subordinated to considerations of environmental impact: 'Economies of scale may increase the scale of the economy beyond that which the environment can sustainably support' (Barry, 1999).

The concern with scale has developed into a call for localization of the economy, as in the work of Colin Hines (1989). Within the green paradigm the priority for economic policy is the strengthening of the local economy for purposes of improving security of supply, to reduce the environmental impact of trade-related transport, and to reinforce the communities for which economic life provides a foundation. Woodin and Lucas (2004: 68-9) sum this up as follows:

Economic localization is the antithesis to economic globalization. This involves a better-your-neighbour supportive internationalism where the flow of ideas, technologies, information, culture, money and goods has, as its end goal, the rebuilding of truly sustainable national and local economies worldwide. Its emphasis is not on competition for the cheapest, but on cooperation for the best.

Building on the work of Hines (2000), Woodin and Lucas (2004) propose four building blocks of economic localization: localizing money and constraining the power of global financial capital; controlling the TNCs through policies such as 'site here to sell here' and import and export duties; replacing the WTO with a General Agreement on Sustainable Trade; backing this up with a system of environmental taxation to reinternalise the externalities caused by global trade. More radical ideas along similar lines include the concept of 'trade subsidiarity', meaning that goods are produced and supplied from as close to the consumer as reasonably possible, and bioregionalism, where resources are drawn from a local eco-system defined by the geographical environment.

Bioregions are natural social units determined by ecology rather than economics, entities that can be largely self-sufficient in terms of basic resources such as water, food, products and services.¹ Ecology demands that we recognize our part in a complex web of natural systems and this should reflect the places we choose to live and how and where we choose to access our resources. Unlike political boundaries, bioregional boundaries are flexible, but should be guided by the principle of subsidiarity in the case of any individual resource or service. Thus, within the bioregional approach beginning with the local is a principle that trumps principles such as price or choice (Desai and Riddlestone, 2002). Such a view has an impressive pedigree, dating back to certain early critics of industrial capitalism such as William Morris (Delvaux, 2005). Curtis describes such a system of interrelated but independent local economies as 'eco-localism' and argues that it includes: 'local currency systems, food co-ops, micro-enterprise, farmers' markets, permaculture, community supported agriculture (CSA) farms, car sharing schemes, barter systems, co-housing and eco-villages, mutual aid, home-based production, community corporations and banks, and localist business alliances' (2003: 83).

Rebuilding strong local economies within our bioregions will present political as well as practical challenges:

A world economy that was sustainable would therefore be almost the exact opposite of the present unsustainable one. It would be localized rather than globalised. It would not have net capital flows. Its external trade would be confined to unimportant luxuries rather than essentials. Each self-reliant region would develop to a certain point and then stop, rather than growing continuously. Investment decisions would be made close to home. And assets would be owned by the people of the area in which they were located. (Douthwaite, 2004).

¹ Clearly 'basic resources' is a subjective concept, with one person's life of paradise being another's hair-shirt. The idea relates to that of trade subsidiarity, where the more complex or luxurious the product the more likely it is to be found outside the local economy (see Cato, 2003) for a further discussion. For a discussion of how a consumer culture itself defines what are basic needs see Cato, 2004b.

This is certainly a radical vision which has far-reaching political as well as economic implications. However, as the following discussion asserts, the ecological realities we are facing require us to revise our economic paradigm in the ways suggested by this sort of vision.

Widening the Circle



‘Economics for people and planet’ and is a catch-phrase which green economists frequently use to describe how what they propose for the world’s economy is different. It is really shorthand for expressing a need to move beyond the narrow view of the economy as it is currently organised. Many perspectives are never considered by a system of economics that privileges white, wealthy, western men (see the photograph of the Bretton Woods decision-makers). The way the global economy is organised can be seen as an extension of a colonial system whereby the resources and people of most of the planet are harnessed to improve the living standards of the minority of people who live in the privileged West. Mies has extended the notion of colonialism to include all those whose labour is exploited, including homeworkers, peasants, women, and the planet itself (Mies, 1999; see also her iceberg model of unsustainable economics).

Green economics encourages the contribution of women to a study which has in the past been dominated by men, and many leading green economists are women. However, as the epigraph to this paper demonstrates, some of the leading thinkers within the field have failed to recognize the need to make explicit reference to the contribution of the female half of the human race. The male dominance of the economy has resulted in a situation where women form 70 per cent of the world’s poor and own only 1% of the world’s assets (Amnesty International). According to UNFPA (2005), on a global basis women earn only 50% of what men earn.

Ecofeminists have assigned to women a particular role in achieving a new understanding of the economy that can ensure sustainability. Their particular insight is

due to the nature of their work, meaning that they are naturally more embedded in the environment and less able to suffer what Plumwood (2002) calls 'remoteness' and which she considers the conceptual failing underpinning the destructive economy. According to Mellor (2006):

What is important about women's work and relevant to green economics is that it is embodied and embedded. Women's work is embodied because it is concerned with the human body and its basic needs. Broadly it is the maintenance and sustenance of the human body through the cycle of the day and the cycle of life (birth to death), in sickness and in health. It is mainly caring work: child care, sick care, aged care, animal care, community care (volunteering, relationship building), family care (listening, cuddling, sexual nurturing, esteem building). Women's work is embedded because it is, of necessity, local and communal, centred around the home. In subsistence economies it is embedded in the local ecosystem. (Mellor, 2006)

It is clear that the vast majority of the world's people who live in what is often termed the 'Third World' or the 'developing world' are also neglected by heterodox economics and their perspective should be brought into the discussion of economics. Neoclassical economics has claimed to provide a route out of poverty through export-led growth, but green economists challenge the effectiveness of this strategy, as well as the planet's ability to sustain the destruction levels of pollution it entails. One analysis suggests that

On income distribution, the strong conclusion is that world inequality has risen since the early 1980s when income is expressed in terms of market exchange rates; and the same is true for PPP incomes when a top-to-bottom ratio is used (rather than an average). A rising share of the world's income is going to those at the top. Moreover the absolute size of the income gap between countries is widening rapidly. (Hunter Wade, 2003).

Trade relies on the unnecessary transport of goods, which produces dangerous levels of carbon dioxide (Simms, 2000), and is considered by green economists to serve the corporations rather than the poor of the world (see Hines, 2002).

On the one hand, the rights of people living in the global South to an equal share in the planet's resources should be respected, but in addition their approach to economics, especially that from indigenous societies which have managed to survive within their environments for thousands of years, has much to recommend it and much we may learn from (Thekaekara, 2004). A native American of the Xikano Xiximeka tribe from Arizona wrote the following about indigenous people's understanding of land:

All land is sacred. It is their bible. Indigenous people do not see the land as a commodity which be sold or bought. They do not see themselves as possessors but as guardians of the land. A fundamental difference between the indigenous concept of land and the western idea is that indigenous peoples belong to the land rather than the land belonging to them. (Zapata and Schielman, 1999: 236).

This sort of perspective to land, resources, and other species guarantees them a better protection than our rapacious, exploitative approach.

We can also learn from the subsistence perspective that still informs the way of life of most of the world's people and first theorized by Vanadana Shiva and Maria Mies (1993). Mies and Shiva argue that the liberalization of markets is a deliberate policy to reduce subsistence and force the poor of the world into the capitalist labour-market, 'The displacement of small farmers is a deliberate policy of GATT'. The policy has had a serious and negative impact on levels of hunger: 'A conservative estimate of the impact

of so-called liberalization on food consumption indicates that in India, by the year 2000, there will be 5.6 per cent more hungry people than would have been the case if free trade in agriculture was not introduced. Free trade will lead to a 26.2 per cent reduction in human consumption of agricultural products.’

Much of this work is prefigured in the writing of Gandhi, who saw the importance of a system of production and consumption of goods that was locally based and human-focused rather than dominated by the market which he termed *Swadeshi*, or self-reliance. His salt marches and campaign for homespun cloth or *khadi* (the origin of the spinning wheel on India’s national flag), were designed to achieve not just national independence but local and personal independence too:

Swadeshi carries a great and profound meaning. It does not mean merely the use of what is produced in one’s own country. That meaning is certainly there in swadeshi. But there is another meaning implied in it which is far greater and much more important. Swadeshi means ‘reliance on our own strength’. ‘Our strength’ means the strength of our body, our mind and our soul.’ (Gandhi, 1909/1991).

In green political economy the discussion of work is not separate from the question of subsistence. Green approaches to the economy have an attitude towards work that is quite distinct from that of mainstream economists. According to Barry (1999: 182):

Where green politics differs from other political theories such as liberalism or socialism is that whereas the latter view the link between production and consumption in terms of ensuring full employment in the formal economy, the green view is to encourage an ideal of self-provisioning, both individually and collectively, within the informal economy, as much as possible, and restructuring the ‘formal’ productive sphere so as to enhance the internal goods of work.

Green economists share philosophical and sometimes spiritual values associated with privileging work as a social, humanising process and not merely an instrumental necessity. Robertson (1985) develops a concept he calls ‘ownwork’, only part of which is in the formal economy. He argues for the revival of the informal economy and the encouragement of ‘homegrown’ local economies, along with local self-reliance and the expansion of the third sector (1989). ‘Ownwork’ is explained by reference to a quotation from Khalil Gibran, ‘You work that you may keep pace with the earth and the soul of the earth. For to be idle is to become a stranger unto the seasons, and to step out of life’s procession that marches in majesty towards the infinite’ (1989: 65). Schumacher (1973) makes a link to the Buddhist concept of ‘right livelihood’, which is a means of achieving subsistence without causing offence to one’s own values, to other people or to one’s environment.

Beyond those humans who already share this planet green economics calls for widening the circle further, to include future generations of human beings, and the other species who are already on the earth. Much as women have been liberated and allowed to enjoy full rights, many now argue that the same should be true of animals. (Singer, 1980). Arne Naess (1986) carried out research into what we really think about the moral importance of other species and found a generalized belief that ‘every life-form has its place in nature which we must respect’. Midgley (1996: 126) interprets his findings as suggesting that:

‘people are not orthodox individualists. . . they feel that they live within a vast whole—nature—which is in some sense the source of all value, and whose workings are quite generally entitled to respect. They do not see this whole as an extra item, or a set of items which they must appraise and evaluate one by one to

make sure whether they need them. They see it as the original context which gives sense to their lives . . . From this angle, the burden of proof is not on someone who wants to preserve mahogany trees from extinction. It is on the person who proposes to destroy them.'

In this respect, as in many others, green economists are representing the views of most people more closely than are heterodox economists.

It was the Brundtland Commission (UNWCED, 1989) that first brought the issue of intergenerational equity to public attention with its definition of sustainability that recognised need to balance our needs with those of future generations. This has been argued for strongly by environmental economists such as Pearce (see Pearce *et al.* 1989), and is clearly inherent in green economics although less frequently made explicit.

Conclusion

Any attempt to capture the breadth of a new and dynamic field of study within four curt headings is sure to miss its mark. It is also inevitable that an attempt to characterize any sub-field of economics will create an artificial narrative of unity when in fact the inhabitants of the field may well be more accurately characterised by their differences than by their similarities. However, in a conference that addresses heterodox approaches to the study of economics it is important to represent what is a growing and disparate field of contributions that share the fundamental recognition that our economics should grow out of an understanding of ecology, that it is quite simply unavoidable that the sustenance of the planet must come first and our needs as people can only be defined in that context, and that we need to achieve a balance between the needs of rich people in the West and those who live in the South, who have yet to be born, and who are members of different species.

References

- Allaby, M. (1998), *Oxford Dictionary of Ecology* (Oxford: University Press).
- Barry, J. (1999), *Rethinking Green Politics: Nature, Virtue and Progress* (London: Sage), especially chapter 6 'Green Political Economy', pp. 142-93.
- Barry, J. (2006) 'Towards a Concrete Utopian Model of Green Political Economy: From Economic Growth and Ecological Modernisation to Economic Security' *Post-Autistic Economics Newsletter*, 36.
- Brannlund, R. and Gren, I.M. (1999), *Green Taxes: Economic Theory and Empirical Evidence from Scandinavia* (Cheltenham: Edward Elgar).
- Cato, M. S. (2004a), 'The Watermelon Myth Exploded: Greens and Anti-Capitalism', in J. Carter and D. Morland (eds.), *Anti-Capitalist Britain* (Winchcombe: New Clarion Press).
- Cato, M. S. (2004b), 'The Freedom to be Frugal', *Growth: The Celtic Cancer—Why the Global Economy Damages our Health and Society* (Dublin: FEASTA): 48-53.
- Curtis, F. (2003). 'Eco-localism and Sustainability', *Ecological Economics*, 46, 83-102.
- Daly, H. E., Cobb, J. B. and Cobb, C. W. (1990), *For the common good : redirecting the economy toward community, the environment and a sustainable future* (London: Green Print).

- Delvaux, M. (2005). "Oh Me! Oh Me! How I Love the Earth": Williams Morris's *News from Nowhere* and the birth of sustainable society', *Contemporary Justice Review*, 8, 2, 131-46.
- Desai, P. and Riddlestone, S. (2002). *Bioregional Solution for Living on One Planet*, Schumacher Briefing no. 8, Totnes: Green Books.
- Douthwaite, R. (1992). *The Growth Illusion: How Economic Growth has Enriched the Few, Impoverished the Many and Endangered the Planet*, Dartington: Green Books.
- Douthwaite, R. (1999). 'The need to end economic growth', in Cato, M. S. and Kennett, M. (eds.), *Green Economics: Beyond Supply and Demand to Meeting People's Needs*, Aberystwyth: Green Audit.
- Douthwaite, R. (2004), 'Why localisation is essential for sustainability', in *Growth: The Celtic Cancer: Why the Global Economy Damages our Health and Society*, Feasta Review no. 2, Dublin: FEASTA.
- Dresner, S. and Ekins, P. (2004), *Green Taxes and Charges: Reducing their Impact on Low-Income Households* (York: Joseph Rowntree Foundation).
- Ekins, P. (2000), *Economic Growth and Environmental Sustainability: The Prospects for Green Growth*, London: Routledge.
- Gandhi, M. K. (1909/1991), 'New Year', *Indian Opinion*, 2 Jan. 1909; reprinted in Raghavan, I. (ed.) (1991), *The Essential Writings of Mahatma Gandhi* (Delhi: Oxford University Press).
- Hines, C., (2000) *Localization: A Global Manifesto* (London, Earthscan).
- Hines, C. (2002), 'Oxfam's Jekyll and Hyde Approach to Trade Will Worsen the Lot of the Poor' (unpublished paper).
- Hunter Wade, R. (2003), 'Poverty and Income Distribution: What is the Evidence' in A. Pettifor (ed.), *Real World Economics Outlook: The Legacy of Globalization: Debt and Deflation* (London: Macmillan).
- Kohr, L. (1957), *The Breakdown of Nations* (London: Routledge and Kegan Paul).
- Lord, C. (2003), *A Citizens' Income: A Foundation for a Sustainable World* (Charlbury: Green Books).
- Mellor, M. (1997), *Feminism and Ecology* (Cambridge: Polity).
- Mellor, M. (2006), 'Ecofeminist Political Economy', *International Journal of Green Economics*, 1.
- Midgley, M. (1996), *Utopias, Dolphins and Computers: Problems of Philosophical Plumbing* (London: Routledge).
- Mies, M. (1999), 'Women in the World Economy', in Cato, M. S. and Kennett, M. (eds.), *Green Economics: Beyond Supply and Demand to Meeting People's Needs*, Aberystwyth: Green Audit.
- Mies, M. and Shiva, V. (1993), *Ecofeminism* (London: Zed).
- Morris, W. (1885/1973), 'Useful Work vs. Useless Toil', in A. L. Morton (ed.), *Political Writings of William Morris* (London: Lawrence and Wishart, 1973), p. 86-108.
- Naess, A. (1986), 'Intrinsic Value: Will the Defenders of Value Please Rise?', in M. E. Soule (ed.), *Conservation Biology: The Science of Scarcity and Diversity* (Sunderland, Mass.: Sinauer Associates Inc.).
- Pearce, D. W., Markandya, A., and Barbier, E. B. (1989), *Blueprint for a Green Economy* (London: Earthscan).
- Plumwood, V. (2002), *Environmental Culture: The Ecological Crisis of Reason* (London: Routledge).
- Robertson, J. (1985), *Future work : jobs, self-employment and leisure after the industrial age* (London: Gower).
- Sahlins, M., (1972), *Stone Age Economics* (Chicago: Aldine Atherton).

- Schumacher, E. F. (1973), *Small is Beautiful: A Study of Economics as if People Mattered* (London: Abacus).
- Schumacher, E. F. (1979), *Good Work* (London: Cape).
- Simms, A. (2000), *Collision Course: Free Trade's Free Ride on the Global Climate* (London: New Economics Foundation).
- Singer, P. (1980), 'Animals and the Value of Life', in T. Regan (ed.), *Matters of Life and Death* (New York: Random House).
- Singer, P. (1981), *Expanding the Circle: Ethics and Sociobiology* (Oxford: Clarendon Press).
- Singer, P. (2002), *One World: The Ethics of Globalization* (New Haven: Yale University Press).
- Thekaekara, S. (2004), 'People First: Justice in a Global Economy', *Growth: The Celtic Cancer—Why the Global Economy Damages our Health and Society* (Dublin: FEASTA): 96-102.
- Turner, R. K., Powell, J. C., Craighill, A. L. (1996), *Green Taxes, Waste Management and Political Economy* (Norwich: Centre for Social and Economic Research on the Global Environment).
- UNFPA (2005), *State of the World 2005* (New York: UN).
- UNWCED (1987), *Our Common Future* (Oxford: University Press).
- Woodin, M. and Lucas, C., *Green Alternatives to Globalisation: A Manifesto* (London: Pluto).
- Zapata, S. and Schielman, S. (1999), 'Indigenous People, Globalization and Transnational Corporations', in Cato, M. S. and Kennett, M. (eds.), *Green Economics: Beyond Supply and Demand to Meeting People's Needs*, Aberystwyth: Green Audit.