

**Green utopias:
imagining the sustainable society**

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Abstract

This thesis concerns the resources available to us for thinking about better futures that embrace the need for ecological sustainability whilst remaining open to the enhancement of human well-being. I take a critical approach to the dominant discourse of sustainable development, set out in the World Commission on Environment and Development's *Our Common Future* (1986), showing the limits of its technocratic, administrative and instrumental orientation to environmental security and human welfare. I go on to examine the possibilities raised by 'deep green' approaches to sustainability. Within this discourse, the future for environmental security and human well-being cannot be based on current patterns of industrial capitalist development that threaten both the planet's ecology and human survival. In opposition to 'progress', ecocentric philosophy imagines a future built on material sufficiency and locates human emancipation in a new and holistic relationship with nonhuman nature.

Central to the thesis is my argument that green utopian fiction offers a distinctive picture of sustainability. Green philosophy boasts a long tradition of utopian thought. However, its theoretical blueprints for change tend to suggest that the environmental problematic can be solved through the application of abstract reasoning. Drawing on work in utopian studies, I develop a theoretical account of how literary ecotopias work by stressing the 'experiential' as well as the theoretical dimensions of living sustainably, exploring the prospects for emancipatory ecocentrism through describing the rich textures of an imagined everyday life. Through close textual analysis, I show how ecotopian fictions insist on a reflexive, moral, and politically engaged approach to the future which contrasts with the extrapolative and managerial visions of sustainable development, as well as the rigid and often excessively 'naturalist' approaches of deep green theory. In doing so, they keep open an intriguing and provocative space in which novel future possibilities for sustainability can be explored.

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Preface and Acknowledgements

This thesis began with the simple and, I once thought, rather straightforward observation that reading literary utopias was infinitely preferable to reading ecological philosophy as a way of exploring green ideas. The development of the arguments that follow was in large part motivated by my curiosity about why that might be the case. In some ways, perhaps, I find myself no further forward: the process of reading and the pleasures it yields remain mysterious; I have remembered that, as a sociologist, generalising from my own experience is an untenable and unreliable epistemological option; and I have even grudgingly learned to acknowledge that some people might prefer theory to novels. But I have begun to clarify, I hope, the distinctive qualities of some important discourses that contribute to our understanding of how we live with nature, and how we might do it more carefully and gracefully in the future.

It did all begin with the novels, though, and for that reason I'm indebted to the work of Marge Piercy, Kim Stanley Robinson and especially Ursula K Le Guin for giving me something to think about. I gratefully acknowledge the funding of the Department of Sociology, and the support of Professor Steven Yearley, my supervisor, without whom this project would never have been started. I also thank Andy Tudor, without whom it almost certainly would not have been finished.

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CHAPTER ONE

Introduction: the cloud and the silver lining

At some point in the late sixties and early seventies, the Western world began to be confronted with what has become known as the 'environmental crisis'. Thanks in part to new and sophisticated global monitoring techniques and the outsider's perspective made available by pictures of the blue planet hanging in space, the pressure that human societies were putting on the earth's biophysical systems began to become common knowledge. The intensity of this early manifestation of environmental consciousness has faded somewhat; some would argue that we have turned our attention to other matters, others that the crisis in ecology has been absorbed and normalised. Nonetheless, we now live with the shadow of ecological breakdown and the possibility of catastrophic collapse. The consequences of two centuries of industrial expansion are visible just about anywhere you look: in the landfill sites that store up the detritus of consumer capitalism, in the polluted lakes and rivers of Eastern Europe; in the heated debates over the development of nuclear reactors to fuel another round of industrial development, and in the degraded air quality and absence of green spaces that define many urban conurbations.

It might seem that when we consider what we know about the physical state of the world and the way we live with it, the future seems either an unthinkable or an utterly miserable prospect. Whether framed in terms of the sudden, dramatic disasters associated with nuclear accidents like Chernobyl, or the slow, steady decline implied by current scenarios of global climate change, it appears that things can only get worse. And indeed, a brief look at the history of environmental thought since the late sixties will turn up a good deal of doom and gloom, a lot of catastrophic predictions, and a pervasive feeling that the end, one way or another, is nigh. At stake is the survival of both the human species and

the earth itself. What is perhaps less obvious is that for the last quarter of a century, environmental discourses have been equally concerned with recouping a better future from what look at first glance to be rather unpromising materials. Alongside the threatened environmental apocalypse and the growing concern over unsupportable rates of resource depletion and pollution, a range of voices have been insisting that not only can the earth be saved, but that the environmental crisis can prompt a reconceptualisation of the good life for human societies. It is these attempts to find routes out of the environmental crisis, to map the possibilities of better, greener, futures, that are the focus of my thesis.

The three discourses addressed here are all in some sense positive or optimistic responses to the no future/bad future paradigm outlined above. Chronologically, they succeed the extremes of catastrophic and survivalist thinking that dominated environmental futurism in the early 1970s. Conceptually, they respond to the threat of environmental breakdown by making a very explicit commitment to a better future, and they do so by invoking the idea of sustainability. Sustainability refers to the need to preserve, care for and respect the earth's life-support systems so that they can continue to sustain human societies into the foreseeable future. It expresses a hope for continuity and longevity, for the enduring integrity of ecosystems and their ability to go on flourishing, growing, and supporting life. Under the broad rubric of sustainability, these three discourses try to show us what a better, greener future might look like. In each case, a concern for environmental security is matched by a desire to maintain or improve human well-being. Sustainability, therefore, is an irreducibly social concept. Although the idea of nature is clearly central to discourses of sustainability, the conceptions of futurity that I examine here are focused on the prospects for transforming society, culture and even metaphysics so that, as the integrity of ecosystems is preserved, the present quality of human social life can be maintained or improved. My focus will be on three very different visions of a sustainable future produced with very different discursive resources.

Chapter Two outlines the policy-oriented discourse of sustainable development that has become the dominant expression of the environment-development problematic since the publication of the World Commission on Environment and Development's *Our Common Future* in 1987 and the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. It traces the coming to power of this now hegemonic conceptualisation of the twin crises of nature and of social justice that seemed to face the world in the late 1980s, and the development paths that promise to lead us out of them. Policy-led discourses of sustainable development focus on the ways in which the current organisation of global capitalism and development can be made more ecologically responsible and socially equitable. It seeks to embed a concern for ecological security into the ordinary operation of both industrial production and global governance, painting a positive picture of a cleaner and less depleting future that also provides a decent quality of life for everyone.

In this chapter I introduce a discursive approach to constructions of the sustainable future that stresses the social and political agendas wrapped up in 'storylines' that offer a compelling narrative of the environmental crisis, constructions of the problem that also set the terms for a particular solution. I assess the gains and losses made as sustainable development took centre stage in debates about the future of social relationships with nature, replacing an earlier dominant paradigm conceived in terms of biophysical limits to economic growth. Chapter Two also addresses some of the problematic assumptions built into sustainable development policy discourse. In particular, I set out the case that its administrative and technocentric framework for thinking about the future eliminates vital questions of meaning and culture from the discourse of sustainability and seriously undermines its prospects for implementation.

Chapter Three examines the ways in which sustainability can be read as a contested concept. As well as dominating current frameworks for environmental policy, the idea of sustainability has roots in the alternative and radically

emancipatory discourse of ecocentric philosophy. This chapter sets out an oppositional story about sustainability, showing how ecopolitical theory builds its vision of a greener future on a fundamental transformation of present human relationships with nonhuman nature. Rather than simply modifying global capitalism to attend to issues of resource depletion and pollution, radical discourses of sustainability insist that the environmental crisis demands a new philosophical and cultural orientation to the natural world, one that seeks to re-embed human societies in a much closer and less instrumental relationship with the ecosystems that support them. Chapter Three sets out the various strands of ecopolitical philosophy that have contributed to the discourse of “emancipatory” ecocentrism, which conceives of the future in terms of limits to material growth and a new model of human well-being that stresses the importance of a reciprocal relationship with nature. It also outlines the various ‘greenprints’ for sustainability that have been produced within ecopolitical philosophy.

Chapter Four introduces a new framework into the debate, examining the extent to which the debate about sustainability could benefit from recasting its future-oriented discourse in explicitly utopian terms. It explores the implicit debt that deep green theory owes to utopianism, in terms of its preference both for critical and liberatory conceptualisations of the environmental problematic and ideal-cultural models for its solution. Insofar as deep green theory explicitly introduces questions of what it might mean to live well in a new relationship with nonhuman nature, the utopian mode is a particularly relevant one, concerned at heart with human well-being. In this context, I introduce the possibility that green utopian novels offer to expand the scope of the sustainability debate once again, and focus on three examples of the genre. Marge Piercy’s *Woman on the Edge of Time*, Ursula K Le Guin’s *Always Coming Home*, and Kim Stanley Robinson’s *Pacific Edge* make a significant contribution to green debates about how the ‘good life’ for human societies can be reconciled with the quest for ecological integrity.

Drawing on recent work in utopian theory, this chapter sets out some of the ways in which we can usefully read the ecological utopia in relation to sustainability debates.

Chapter Four sets out a theoretical framework for the analysis of the three novels that is developed in Chapters Five and Six. These two chapters address different dimensions of ecotopian fiction. Chapter Five examines the ‘critical’ aspects of Robinson’s, Le Guin’s and Piercy’s utopias, that is, the ways in which certain reflexive and intertextual qualities of the narratives allow them to deconstruct and rethink the dominant discourses within which the future is conventionally and generically conceived. In particular, this chapter considers how the ecotopia can portray a genuinely post-industrial future without succumbing to powerful discourses that position it in terms of either apocalypse, progress or nostalgic pastoral. Chapter Six, on the other hand, explores what might be called the ‘experiential’ dimension of the green utopias. Here, the focus is on how those aspects of the narrative to do with building and describing the texture and detail of the whole way of life of a utopian world invite our empathy for and identification with a sustainable future society.

My particular thematic concern is with the ways in which the space of the future can continue to be held open to multiple and heterogeneous possibilities for the development of the nature-society relationship, rather than closed down around a single narrative of sustainability. Sustainable development policy discourse, I will argue, is from the outset colonised by the assumption that current forms of social, political and economic organisation can be made ecologically benign with only minor modifications. By failing to address this assumption, it reproduces in its future vision the kind of society that is arguably responsible for the environmental crisis. Radical ecopolitical narratives of sustainability, on the other hand, begin by deconstructing the dominant ideology of progress and the rational instrumental attitude towards nonhuman nature that it engenders. As such, their visions of sustainability are predicated on a fundamental discontinuity

with the present, opening up the future to a wide range of new and liberatory possibilities. Ecotopian fictions, also built on a break with the present, elaborate their green futures through richly engaging pictures of the detail of sustainable ways of life, but also incorporate a critical engagement with the powerful discourses that conventionally construct the future. More than anything, the conceptions of green futures discussed here are inflected by the cultural and ideological conditions of their production. The future is never a blank canvas; the space onto which we project hopes, visions and expectations of other ways of being is always marked by the practices and discourses of the present. What matters, perhaps, is how we respond to what has already been inscribed.

CHAPTER TWO:

The dominant discourse of sustainable development

INTRODUCTION

Amidst the clamour of talk about environmental problems and the future of nature and society, whose are the loudest voices, and what are they saying? This chapter begins with the assumption that the discourse of sustainable development has become the dominant language for talking about the ways in which human societies live with their environments, and the possibilities for changing those relationships in the future. The concept of sustainable development has been elaborated from a multiplicity of political, ethical, sociological and ideological perspectives; definitions have been offered, developed, contested and contradicted; and debates around appropriate frameworks for implementation have increasingly come to the fore. The outcome of this process has been a huge expansion in the scale and complexity of debate over sustainability, increasingly drawing attention to the ambiguity of the concept. Some voices, however, are heard more loudly and clearly than others. These are the definitions whose implications set the terms of the debate and constitute the moving centre around which the public and academic discourse eddies and flows.

Sustainable development thus constitutes the dominant discursive framework within which the policy or “formal environmental agenda” is currently conceived (McNaghten et al, 1995, p7). The term gained widespread recognition and political currency following the publication in 1987 of *Our Common Future*, the report of the United Nations World Commission on Environment and Development (hereafter the Brundtland Report after its main author). The United Nations Conference on Environment and Development held in Rio de Janeiro in 1992 might conveniently be understood to mark the moment at which sustainable development became the “accepted goal of policy makers” (Glasbergen and

Blowers, 1995, p163), the point at which the conceptual work of the Brundtland Report took on practical significance (Yearley, 1996, p96). The Rio Summit provided a framework for strategic plans for the implementation of sustainable development in the form of Agenda 21 (Middleton et al, 1993, p1). In its turn, Agenda 21 has constituted the foundation on which a thousand policies for local sustainability have been built and, with debatable outcomes, implemented under the aegis of Local Agenda 21. The journey from Brundtland's global analysis to its hopeful implementation at the local level traces the coming to power of an institutional, policy-oriented discourse of sustainable development.

Discussions of sustainable development, and *Our Common Future* in particular, frequently comment on the apparent universality of the concept's appeal. Lafferty, for example, notes that the "saleability" of the unsustainable society is "on a par with that of a non-democratic society. It's simply not on" (Lafferty, 1995, p223). Yearley, whilst taking issue with the exclusive claim of these two concepts (sustainability and democracy) to universal acceptance, nonetheless concurs, suggesting that the concept of sustainable development positions itself as a rational objective from which no-one could sensibly wish to diverge (Yearley, 1996, pp132-133). Similarly, Torgerson asks:

How could anyone reasonably object to something that is obviously meant to resolve environmental problems and promote the enduring well-being of humanity?
(Torgerson, 1995, p10)

This chapter explores the basis on which one might reasonably take issue with the concept of sustainable development, or at least with its articulation within the terms and assumptions deployed by its originating framework, the Brundtland Report. For many commentators, it is the very vagueness and ambiguity of the concept that has secured its wide constituency of support, whilst simultaneously ensuring the contested nature of the discourse of sustainability (see, for example, Torgerson 1995; McManus 1996; Hajer 1995, 1996; Merchant 1992). It might be

argued that sustainable development has achieved hegemony in the sphere of environment/development discourse precisely because of its ambiguity or, viewed more positively, its flexibility and openness to multiple interpretations.¹ Far from being a precisely defined operational objective, sustainable development seems to function largely as an “orienting vision” (Torgerson, 1996, p10): a signifier of long term objectives aspirations for human welfare and ecological conservation.

In order to examine the heterogeneous and contested character of sustainable development I follow Hajer’s discourse analytic approach to understanding the so-called environmental problematic.² This approach emphasises a reading of constructions of nature, society and the relationships between them as claims on the future that simultaneously express and disguise particular social preferences (Hajer, 1996, p247; see also Szerszynski, et al 1996, p23). As in other cultural or discursive approaches to the environmental crisis (see Beck, 1992, and Lash et al, 1996, for example), Hajer’s key concern is to break away from the realist epistemology that saturates policy constructions of nature/society and draw attention to the ways in which

[a]ny understanding of the state of the natural (or indeed the social) environment is based on representations, and always implies a set of assumptions and (implicit) social choices that are mediated through an ensemble of specific discursive practices. This does not mean that nature ‘out there’ is totally irrelevant... [but] environmental politics cannot be understood without taking apart the discursive practices that guide our perception of reality.

(Hajer, 1995, p17)

¹Hajer explicitly argues that ecological modernisation is *not* a hegemonic discourse, in that it is not the only available construction of the environmental problematic (Hajer, 1995, p30). However, insofar as sustainable development increasingly constitutes a discourse which conditions the terms on which others might be articulated, and alternative constructions must increasingly position themselves in relation to it, one might speak of it as hegemonic in this domain.

²This is an adaptation of the original formulation (“the world problematique”) coined and popularised in Meadows et al’s *Limits to Growth* (1972). This usage is popular in broadly

Like Ulrich Beck's work, this is a radically constructionist position in which neither the 'objective' existence of environmental hazards nor the scientific apprehension of them alone trigger environmental concern. For Beck, the environmental problematic is profoundly and almost exclusively social; its construction in terms that are simultaneously naturalistic and technocratic is a misapprehension. Rather, the cultural "horizon" of peoples' expectations and values, born out of social experience and mediated via cultural symbols, history, and material conditions, must be the main point of reference for understanding ecological concern (Beck, 1995, esp pp43-47).

Drawing on the work of Foucault and Billig, Hajer focuses on the ways in which particular emblems or "storylines" provide the cognitive focal points around which "discourse coalitions" emerge to construct and reconstruct both the definition of the problem and the discursive structure within which any resolutions might be found. An ecological 'story-line' consists in a "generative sort of narrative that allows actors to draw upon various discursive categories to give meaning to specific physical or social phenomena" (Hajer, 1995, p56). Storylines impose apparent order and unity on the multiple and complex aspects of social and environmental 'reality' that constitute an ecological problem. They do so by effecting a kind of "discursive closure" (Hajer, 1995, p62) that makes some versions of reality available whilst suppressing others. Such closures do not impose a monolithic and singular interpretation on events. Part of the cognitive appeal of storylines is that this discursive closure provides the touchstone for a wide set of "symbolic references"; it enables the polyvalence or "multi-interpretability" of the issue at hand (Hajer, 1995, p62). The particular form of

cultural/discursive approaches to ecological discourse - see for example Hajer, 1995, Lash et al, 1997.

the closure, however, ensures that the storyline is only interpretable within limits, making some readings of the situation available whilst excluding others.³

In Hajer's account, sustainable development is one of the constitutive emblems or story-lines of the bigger discursive ensemble of ecological modernisation (Hajer, 1995, p65). It tells a story about the orderly progression of societies from an era of growth that has been dirty, damaging, and self-defeating, to a new era of growth that is clean, ecologically cautious, and self-perpetuating. The concept of sustainable development frames the solution to the environmental crisis in terms of the discovery of 'development paths' that lead to an ecologically sane and more equitable future. But as we have already begun to observe, sustainable development, like all storylines, depends on a good deal of ambiguity in presenting its vision of a future in which we might all feel we have a stake. The constructionist position adopted by Hajer allows us to interrogate sustainable development discourse in order to uncover the terms in which it effects its 'closure' or reduction, and thereby explore the power of its metaphorical construction of a cognitively appealing future, the future we couldn't help but want.

My orientation towards sustainable development rests on the ways in which its ambiguity plays out with respect to the vision of the future generated within its discursive paradigm(s). Sustainable development appeals to the extent that it appears to open up new and appealing possibilities for envisaging a fundamentally different future society. My project is to seek the means by which the constraints introduced by the underlying assumptions of sustainable development discourse, in its policy inflections, in fact work to close down both the scope and content of the future. This chapter explores the attempt to frame sustainable development within the technical conventions of policy debate, focusing in particular on the significant absences and closures of that paradigm to

³ On the power of a compelling environmental storyline to draw previously "singular and unrelated" events together around an explanatory metaphor, bestowing new meanings on the various elements of the problematic, see Hajer's example of acid rain (Hajer, 1995, p64).

show how the concept always exceeds or eludes it. On this reading, sustainable development always and inevitably resists its reduction to an administrative or operational policy framework, relentlessly alluding to “a broader context” which “provides an opening for explicit disputes about the meaning of development and the shaping of the future” (Torgerson, 1995, p10).

I begin by exploring what sustainable development means by looking in some detail at its powerful and persuasive articulation in the Brundtland Report (WCED 1987), which put in place the framework that continues to condition the global policy agenda on environment and development (Middleton et al 1993 p6).

THE ORIGINS OF SUSTAINABLE DEVELOPMENT: *Our Common Future*

The World Commission on Environment and Development (WCED) was inaugurated in October 1984, on the mandate of the United Nations General Assembly, to investigate the prospects for human development at a time of “unprecedented growth in pressures on the human environment, with grave predictions about the human future becoming commonplace.” (WCED, 1987, p356). Brundtland sought to map conceptually the possibilities for a ‘common future’ that would guarantee ecological and economic security whilst making a commitment to a new global ethic that emphasised a more equitable approach to the distribution of human welfare, with particular respect to the different development paths of the North and South. The power of the concept of sustainable development derives firstly from the Brundtland Report’s diagnosis of the environment-development problem - its identification of a new “presumed ontological truth” (Lafferty, 1995, p228) - and secondly from its prescription of a new ethical framework for its global resolution - its widely endorsed “normative appeal” (Lafferty, 1995, p231).

The Commission's Report sought to undo what were seen as the damaging binary oppositions between development and environment (or economy and ecology) that had dogged environmental debate since the politicisation of the so-called environment crisis in the late sixties and early seventies. The goals of each side of the pairing, usually understood as being to a greater or lesser extent contradictory, are re-thought as potentially complementary. Stable future societies depend on the resolution of the pair around the concept of sustainable development. Although throughout the Brundtland Report the concept of sustainable development is articulated in a number of ways, its chief and most widely quoted definition is as follows:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

(WCED, 1987, p43)

The Report called for a new era of economic growth predicated on the recognition that global systems of economic production and exchange on the one hand, and the global environment on the other, are systematically interrelated on all levels. It diagnoses the current environment/development crisis in terms of a "vicious downward spiral" (WCED, 1987, p27; see also WCED, 1987, pxiii). In the 'underdeveloped' countries of the South, poverty and environmental degradation are locked together in vertiginous freefall. In relation to what Terhal has called the "unsustainability of poverty", the Brundtland Report posits a direct link between low per capita income and overexploitation of resources to meet basic needs, causing further cycles of environmental decline and continued poverty. In the North, economic progress and prosperity is fragile insofar as it is attained through the depletion of finite natural resources and the production of chronic and large-scale environmental degradation (what Terhal calls the "unsustainability of affluence"; Terhal, 1992, pp132-133). In the face of this apparent stand-off

between environment and development, and between North and South, the Brundtland Report sets out

a new approach in which all nations aim at a type of development that integrates production with resource conservation and enhancement, and that links both to the provision for all of an adequate livelihood base and equitable access to resources.

(WCED, 1987, pp39-40).

The vicious spiral of unsustainability and poverty is to be replaced with the 'virtuous circle' of sustainable development. Sustainable development consists in engineering a positive interrelationship between, on the one hand, the preservation, enhancement, and more equitable distribution of environmental resources, and on the other, the economic development which provides for all a livelihood which meets basic needs and improves quality of life. Economic growth must incorporate a heightened sensitivity to the finitude of the resource base on which it depends, and to the negative environmental impacts of production. Our concept of development must be extended to focus on global inequalities, and pay attention to its qualitative dimensions as well as its straightforwardly quantitative ones. It also draws attention to the need for the integration of environment and development issues in policy-making.

The Brundtland Report was all-embracing in its willingness to tackle the critical issues of environmental degradation and economic inequality facing the world in the mid-eighties. It examined questions of population and human resources as well as the preservation of species and ecosystems, and issues around food security, energy, industry and urbanisation. It considered the prospects for managing the global "commons" (ranging from the oceans through Antarctica to deep space) and securing global peace and security. *Our Common Future* was far from sanguine about the threats facing the world's environment and its peoples, which include the "disappearance of rainforests in the tropics", the "loss of plant and animal species"; "changes in rainfall patterns", and "toxic chemicals, toxic

wastes and acidification”, as well as threats from ozone depletion and nuclear war (WCED, 1987, p22). It paid particular attention to the poorest peoples in developing countries who face “life-threatening challenges” of desertification, deforestation, pollution and poverty (WCED, 1987, p22). Taken as an interrelated pattern of environmental degradation, depletion and pollution, these problems bring us close to “thresholds that cannot be crossed without endangering the basic integrity of the system” (WCED, 1987, 33), or points of critical damage to the global biosphere beyond which the “carrying capacity of the resource base” will be irretrievably damaged (WCED, 1987, p45). But the Report ultimately offers an optimistic vision of a secure and more equitable future in which “human needs and aspirations” (WCED, 1987, p43) can be satisfied without undermining ecological systems; indeed, one in which economic growth can be fuelled rather than dampened by its pursuit of green objectives. At the heart of this optimistic vision is the Report’s assertion that “technology and social organization can both be managed and improved to make way for a new era of economic growth” (WCED, 1987, p8).

The guiding assumptions behind the framing of sustainable development discourse are clear even from this brief resumé of the Report’s intentions and definition. Firstly, the power of ‘sustainable development’ is primarily *conceptual* rather than practical. It rests on our ability to see two socially-constructed systems or dynamics (economic development and ecological security) as complementary rather than contradictory. As in Hajer’s reading of ecological modernisation⁴ as a process of “discourse structuration” (1997, p250), the success

⁴A term introduced by Hüber and Janicke - see for example M Janicke (1985) *Preventive Environmental Policy as Ecological Modernisation and Structural Policy*, Berlin; WZB. ‘Ecological modernisation’ refers to those environmental policy discourses emerging in the early to mid eighties that recognise the environmental problematic as global and structural, but holds that it can nonetheless be managed by existing institutions. The Brundtland Report has been seen as one of its “paradigm statements” (Hajer, 1995, p26). Key to the discourse is the assumption that ‘nature’ and environmental problems can be comfortably internalised by modernity; that is, integrated at the first stage of policy planning (conventionally constructed in purely economic terms) and economic decision-making. One of the key differences between ‘ecological modernisation’ and ‘sustainable development’ consists in the extent to which the former emphasises the potential of (technological) innovations in environmental care and prevention to actively promote economic development, rather than simply not impede it, such that the process

of sustainable development discourse has been its conceptual capacity to “internalise” nature - that is, to work from abstract principles to show how environmental care and conservation can be integrated into the conceptual apparatus of institutional frameworks formerly dedicated to the management of economic growth and issues of (re)distributive justice (Hajer, 1995, p25). Paradoxically, the success of sustainable development’s rhetoric draws attention to the gaps and potential contradictions between its insistence on a new and realist ontological truth and its dependence on discursive constructions for its ethical power. As I will go on to discuss, once the constructed and discursive nature of the environmental problematic is apparent, the genie of sustainability is out of the bottle. Diverse, even contradictory, interpretations of the future of nature/society from a broad range of cultural as well as scientific and policy contexts emerge as equally important spaces for the consideration of an ecologically secure future which guarantees human welfare.

Secondly, sustainable development treats the world as a globally integrated system. The “new reality” to which the Brundtland Report refers in its opening pages, its claim to a “presumed ontological truth” (Lafferty, 1995, p228), is rhetorically constructed with reference to the Earth as a unified object, a “fragile ball” floating in space (WCED, 1987, p1). This Earth is perceived primarily as a physical object, the emblem of a seamless and single global biosphere. Environmental problems are likewise conceptualised as an interwoven pattern spread over the globe. Onto that globe the Report projects the further interpenetration of economics and ecology, bound together across the planet in “ever-tightening networks” (WCED, 1987, p27; see also p37). One of the main thematic tropes of the Brundtland Report is that whilst the “Earth is one”, the “world is not” (WCED, 1987, p27) – that we continue to address problems of environment and development as separate nations and within fragmented decision-making institutions. In this context, ‘sustainable development’ is the

of ‘ecological modernisation’ itself becomes the fuel for a new round of economic growth. The difference is a matter of emphasis rather than one of substance, however.

rubric under which the world can work together as one to save the planet and the “whole human family” (WCED, 1987, p366). The Brundtland Report, in common with many environmental discourses, constructs a distanced rather than a situated perspective on the planet to make its case; the apprehension of global ecological systems is made to map the social and political systems in which they are entangled on a similar scale, and from a similar distance. Much has been made in this respect of the impact of the photographs of the earth from space from the first moon missions in 1969 (see Sachs, 1994; 1999). The space explorations found, rather than new worlds, a new and holistic understanding of the old one. A vantage point could now be offered to the Earth’s inhabitants which adds to our situated and local experience of environment an apprehension originating outside of it, making available a “new generative frame of unity”⁵ (Featherstone, 1990, p2). It is on this basis that sustainable development makes its inclusive and universal appeal. Acceptance of the existence of a “comprehensive environmental problem” (Hajer, 1995, p28) suggests the need for inclusive solutions:

...the Brundtland Report, even in its very title, *Our Common Future*, offered sustainable development as the *shared goal* of humankind... Previously, economic growth was a development objective that could be pursued by all nations individually. For the first time, (sustainable) development is not something that everyone can do separately but a joint global project... (Yearley, 1996, p132).

Finally, the definition of sustainable development depends on its projection into the future. ‘Sustainable development’ self-consciously constitutes itself as a response to the “grave predictions about the future” that are becoming “commonplace” (WCED, 1987, p356), and depends for its articulation (in its

⁵ Of course, this new frame and the emblem of ‘the blue planet’ had already been extensively used by the nascent environmental movement in the late 1960s and early 1970s. See Sachs, 1999.

most widely cited and powerful definition) on a sense of our contemporary responsibilities to putative “future generations” (WCED, 1987, p43). As Glasbergen and Blowers put it, “[s]ustainability is essentially about the future and what we should hand on” (Glasbergen and Blowers, 1995, p169). Both terms - ‘sustainability’ and ‘development’ - build bridges between the present and the future tense. Sustainability means continuation; it signifies the possibility that some situation, system, or quality can be maintained indefinitely. Similarly, ‘development’ implies a movement through time, a change for the better as we move towards the future. The extent to which this is taken to be either open-ended or teleological is again debatable; I will outline below some of the ways in which the end-point of sustainability has been colonised by development discourse before the other possibilities it generates even get breathing space.

Whilst the concept of sustainable development relies on a ‘positivist’ account of what we are doing now and have done in the past, its moral appeal is rooted in a normative call for better behaviour in the future. Delicately and uncertainly poised between the two, the construction of ‘the present’ as a crux-point is a persistent motif in the Brundtland Report. Its rhetoric freezes in time a point suspended between the bad old days of unsustainable practices, and the wide open future of sustainable “development paths” (WCED 1987). The following quotes are typical:

The time has come to break out of past patterns. Attempts to maintain social and ecological stability through old approaches to development and environmental protection will increase instability...We are unanimous in our conviction that the security, well-being, and very survival of the planet depend on such changes, now.

(WCED, 1987, p22-23)

We are not forecasting a future; we are serving a notice - an urgent notice based on the latest and best scientific evidence - that the time has come to take the decisions needed to secure the resources to sustain this and coming generations.

(WCED, 1987, p2)

A doubled sense of futurity is wrapped up in the Brundtland conception of sustainable development. Firstly, there is the immediate need to break with the past, to shift in the short term from unsustainable to sustainable development paths; this imminent “transition” (WCED, 1987, p316) is framed in terms of the need for an urgent reform of international institutions to lay the groundwork for sustainable development (WCED, 1987, see p10, for example and p313). If this shift can be achieved in the “balance of this century” (the 20th), then the next promises “a more secure, more prosperous, more equitable and more hopeful future” (WCED, 1987, p366).

Secondly, there is the sense that, once the institutional conditions have been established, sustainability is an ongoing and self-perpetuating process. In the Brundtland Report sustainable development is seen not as an identifiable objective or goal, but as an open-ended project; not a “fixed state of harmony”, but rather

a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.

(WCED, 1987, p9)

In this formulation, the “future generations” of the Report’s definition come to constitute an inexorably shifting object of moral responsibility, guaranteeing an ethical focus on ecological security and human welfare into the long-term future and beyond. The virtuous circle generates the conditions of its own continuation.

The vision of sustainability presented in the Brundtland Report was not the first powerful discourse to conceptualise the environmental problematic as global and systemic. An orientation towards the future has been at the centre of both the pragmatic ('this can't go on') and ethical ('this mustn't go on') rhetorics of the green case since the emergence of political environmentalism in the second half of the twentieth century, to the extent that 'futurism' might be considered an "inherent feature" of environmental politics (Ross, 1991, p184). These dimensions were present in environmental discourse well before sustainable development emerged as the dominant eco-social storyline. A number of analysts have suggested its antecedents across a range of social and cultural contexts. The institutional forerunners of sustainable development are usually taken to begin with the UN Conference on the Human Environment in Stockholm in 1972 chaired by Olaf Palme, which focused on the growing number of environmental problems and began the process of relating them systematically to poverty. Stockholm 1972 also led to the foundation of the United Nations Environment Programme (UNEP), dedicated to monitoring major environmental problems and producing "schemes for safeguarding the future of the environment" (Middleton et al, 1993, p15). This was succeeded in 1980 by the Brandt Report, formally *North-South: A Programme for Survival*, and its follow-up in 1983, *Common Crisis*. Finally, the Report of the UN Palme Commission (Commission on Disarmament and Security Issues), *Common Security*, drew attention in 1982 to an increasing need for multilateral cooperation on issues of global safety, including ones frequently allied to environmentalist critique, the most obvious being that of nuclear power.⁶

Outside the UN, global and future-oriented versions of the environment-development problematic were articulated in international policy-making and non-governmental organisation (NGO) documents. Hajer identifies the joint

⁶The main sources in this section are Middleton et al (1993) pp13-16; McManus (1996) pp48-50; Hajer (1995) pp94-100.

report of the International Union for the Conservation of Nature (IUCN) and the World Wildlife Fund (WWF), supported by the United Nations Environmental Programme (UNEP) and United Nations Educational, Scientific and Cultural Organisation (UNESCO), as key to introducing the notion of sustainability into what had previously been primarily nature conservation discourses. As such he reads this report, the *World Conservation Strategy*, as an important building-block of ecological modernisation (Hajer, 1995, pp96-97). Similarly, a number of environmental directorates and committees were established in the 1970s under the aegis of the Organisation for Economic Co-operation and Development (OECD), the UNEP, and the United Nations Economic Commission for Europe (UN-ECE). Their attention to the institutional dimension of environmental planning produced a critique of legalistic and 'end-of-pipe' solutions to problems of conservation and pollution which served as the seed-bed of the new conceptual language of ecological modernisation.

Critical commentators have argued, however, that the emergence of sustainable development discourse elbowed out competing formulations of a more radical ethical and global environment and development problematic. Lélé, for example, notes that it replaced an earlier idea of 'eco-development', a concept which placed more emphasis on the notion of local self-reliance and economic justice in the South than sustainable development would ultimately come to espouse. O'Riordan notes its origins in a series of African-based conferences in the early 1970s which focused on the conservation issues underpinning development (Lélé 1991; O'Riordan 1993). Most relevant here, however, is the idea of the 'limits to growth', which preceded sustainable development as the dominant discursive storyline around which ideas about a secure future for human societies and nonhuman nature were framed. Like sustainable development, the limits discourse conceived of the object of its problematic as one planet and one world. In stark contrast to *Our Common Future*, however, its analytical and ethical core comprised the assertion that there might not be a 'liveable' future if current course of industrial capitalist development continued (see for example Ross,

1991, p191). The next section examines the key elements of this influential view of the environmental crisis.

THE “APOCALYPTIC HORIZON” OF ENVIRONMENTAL DISCOURSE⁷

The emergence of a politicised environmentalism in the late 1960s and 1970s introduced the notion of limits into the public imagination, calling into question the ideologies of unlimited progress that had served industrial (and ‘post-industrial’) capitalism so well for so long. Accompanied by images of the fragile ‘blue planet’, the new physical symbol of our bounded, finite and singular earth, the ‘limits to growth’ discourse addressed a radical challenge to business as usual for industrial capitalism. It fundamentally altered the terms within which it was possible to think about the future of nature and society. Against the background of wider changes in values and culture, the exploitation and degradation of nature served as the focal point of a wake-up call to the West. Although many critics were concerned primarily with the ‘death’ of the planet, the end of human life on it, and the chances of averting imminent ecological catastrophe, a vocal minority argued that as we impoverished and depleted Nature, so we alienated and deprived ourselves - of self-determination, participation in social decision-making, the opportunities for human growth and development; in short, of a life of meaning and autonomy outside the strictures of global capitalism.

This cluster of issues, which ranges from the strictly ecological to the broader arena of quality of life, human well-being and self-realisation, hangs together in

⁷ (Dryzek, 1997, p26).

important ways around the idea of the future. Andrew Ross has observed that

[a]mong the new social movements that emerged in the late 1960s and early 1970s, the ecology movement was the one most tied to an explicit set of theses about the future: how best to avoid a disastrous, and generate a better, future.

(Ross, 1991, p184).

Three texts are widely recognised as having played a crucial role in the generation of a public discourse constellation centred on the notion of limits to growth and questions of human and ecological survival: the Club of Rome's seminal report *The Limits to Growth* (Meadows et al, 1972); Edward Goldsmith et al's 'A Blueprint for Survival', published in *The Ecologist*, also in 1972; and E F Schumacher's *Small is Beautiful* (1973). These three texts crystallise the limits paradigm in ecological thinking, producing a new storyline that re-ordered understandings of social relationships with nature.⁸ They constitute a key moment in the construction of Western environmental concern.

In this section I draw on the work of Douglas Torgerson to explore, firstly, the dramatic (re)construction of the future within the limits paradigm, and, secondly, what was gained and lost in the transition from a discourse of 'limits' to one of 'sustainable development' as the dominant storyline of future human social relationships with nonhuman nature. Torgerson characterises the major shift in environmentalist discourse in the last thirty years or so as the transition from a paradigm founded on absolute ecological limits on social/economic growth to one that by-passes absolute limits in the name of the apparently more positive and optimistic conception of sustainable development. In particular, Torgerson's account develops a reading of both the limits discourse and its successor, sustainable development, which systematically relates both to the dominant ideologies of progress at the heart of advanced industrial societies. Torgerson's

⁸On this discursive shift, see for example McManus 1996, Eckersley 1992, and Dobson 1995.

analysis also reveals how slippery a signifier the future has become in environmental discourse, hedged about with uncertainty from all sides.

The limits to growth

According to Torgerson, the *Limits to Growth: A Report for the Club of Rome on the Predicament of Mankind* was the most “dramatic announcement” of the looming environmental crisis at its publication in 1972 (Torgerson, 1995, p7). Its arguments were intended to initiate a “process of global cognitive change” (Hajer, 1995, p82), and they reached a wide and receptive audience. According to Dryzek, it sold over four million copies in four years (Dryzek, 1997, p26). *The Limits to Growth*, as its subtitle signifies, was a report for the Club of Rome, an élite international group of scientists, capitalists, and policy-makers concerned with the so-called ‘predicament of mankind’: the growing sense that an increasingly interconnected global system of production was heading towards the destruction of the planet.⁹ Its publication under the aegis of the Club of Rome lent authority to the message, so that its apocalyptic predictions could not easily be discredited as “yet another product of marginal, anti-progress activists” (Hajer, 1995, p81). The political debate over its new conceptual framework rumbled on throughout the seventies and into the eighties, and in the US inspired President Carter to commission the futurological *Global 2000 Report*, framed in terms of limits (see for example Eckersley 1992 p13; Ross 1991 pp185-188). Its essential insight was based on a model of the relationship between global socio-economic systems and the globe itself, constructed in terms of the exponentially expanding growth of the former in contrast with the physically finite capacities of the latter. The extrapolation of this model, the imagined consequences of the collision between economic growth and its physical limits, informs the construction of green future visions dominant during this period of environmentalist discourse.

⁹Torgerson, 1995, p8; see also Hajer, 1995, p80; Dryzek, 1997, pp26-30; Ross, 1991, pp184-189 *inter alia*.

The study is based on computer modelling of system dynamics to predict world trends relating to five key variables: population, food supply, industrialisation, pollution, and depletion of non-renewable resources. Bluntly, the Report found that industrialism equals unsustainable and catastrophic expansionism. Sooner or later (the time-frame of the computer runs stretches over around one hundred years) limits to growth will be hit and disaster is inevitable, in the form of the uncontrollable breakdown of economic, ecological and social systems. The capacity of natural systems to support and absorb industrial expansion and its ecological consequences is inherently limited. The Report focuses in particular on the potential for a sudden decline in population and industrial capacity (Meadows et al, 1972, p23). The computer runs simulated the interaction of the key variables, globally aggregated, through a number of possible scenarios. Firstly, a 'business as usual' model was run, which assumed the continuation of current trends in population growth, resource use, rates of pollution, industrial production, and availability of food. In this 'standard run', continued industrial expansion uses up massive resource inputs, leading to price rises and depleted reserves; the industrial base is undermined, along with service and agricultural sectors. Population eventually decreases as mortality rates grow due to the deterioration of food supplies. In this scenario, "overshoot and collapse" are brought about due to the depletion of non-renewable resources, and "population and industrial growth will certainly stop within the next century at the latest" (Meadows et al, 1972, p126), with incalculable social catastrophe to follow.

Two features of the extrapolative model are particularly emphasised in *The Limits to Growth*. The first is the nature and threat of *exponential* growth; that is, growth at a constant percentage rate of the whole over a given time period. In contrast with linear growth (increase by a constant amount over the given time period), exponential growth threatens to produce dramatic and sudden changes over a very short time because of the heavy weighting of 'doubling time' built into the end of the system. The two most common examples given of this effect are that of a pond in which a lily pad is growing to double its size every day, and

that of placing rice grains on a chessboard (doubling the numbers on each square). In the first example, the pond is only half full on the penultimate day; suddenly the pond is completely covered. In the second, the numbers build up so that whilst to cover the 24th square takes 100,000 grains of rice, by the fortieth about a million grains will be needed (Meadows, et al, 1972; Dobson, 1995, p76). Hence the importance of the 'early warning system' of the Report's model. Its predictions of stark and gloomy outcomes are explicitly designed as a corrective to the complacent delusions of security enabled by the logic of exponential growth. The future cannot be taken for granted.

The second feature relates to the dynamic interaction of the variables at work within the system, hence the Report's stress on positive and negative feedback loops (Meadows et al, 1972, pp25-44). All the variables in the system are intimately interrelated in a complex of interacting functions. Hence the importance of a subsequent series of scenarios based on altering the variables in the standard run. The second computer run in *Limits to Growth* factors in the discovery of double the current amount of non-renewable resources. In this case, "overshoot and collapse" ensues due to the sudden increase in pollution levels attributable to continued over-industrialisation, leading to increased mortality as a result of pollution and lack of food. The next three runs of the model build in the assumption that "mankind's [sic] ingenuity and social flexibility" (Meadows et al, 1972, p126) will uncover ways of circumventing limits, that is, they focus on the prospects of managing our way out of collapse using technology. The outcomes of these further runs are equally dismal, and intimate the third major plank of the Club of Rome's case:

The application of technological solutions alone has prolonged the period of population and industrial growth, but it has not removed the ultimate limits to that growth.

(Meadows et al 1972 p141)

The 'predicament of mankind', therefore, is not amenable to the technological fix. The combination of these three factors - exponential growth in a finite biospherical system, the dynamic interaction of social, economic and ecological variables, and the failure of Promethean technological solutions to ameliorate a bleak set of circumstances - produce the limits discourse's distinctive orientation towards the future, and in particular the parameters within which future nature-society relationships must be imagined. It is a future imagined and constructed around the immovable, intransigent and non-negotiable finitude of the planet. The limits themselves, whilst in theory intangible and in practice unquantifiable, constitute the horizon of human social futures. Beyond them lies a ruined and catastrophic wasteland, a future marked by its extreme discontinuity with the present. The prescription, as John Dryzek observes, is "obvious": "humanity needed to change its profligate ways to survive, or, more precisely, to avoid the apocalypse of overshoot and collapse" (Dryzek, 1997, p27).

The capacity of environmentalism to radically confront the dominant ideologies of industrial capitalism rests on its case for the limits to growth (Dobson, 1995, p16), which "throw[s] into question the hopeful vision of progress which had previously transfixed advanced industrial society" (Torgerson, 1995, p4). Most ecological critics of modernity share the conviction that the expansionism of industrialism constitutes the systemic core of environmental exploitation, depletion and despoliation. At its simplest, the pursuit of economic growth can be seen in the commitment of national governments to continuing growth in Gross National Product (GNP), no matter that its calculation includes ecological deficits as economic additions (see eg Anderson 1991). In the international arena, powerful discourses frame inequalities in human life-chances in terms of the ability of less developed countries to join the development 'race' (Sachs 1999), that is, to initiate and continue a cycle of increasing economic growth on a par with Western industrial democracies. Commentators like Jonathan Porritt have suggested that the expansionist ethic of industrialism constitutes a "super-ideology" that is busy destroying the material base of its own continuation, even

as it apparently 'succeeds' (Porritt, 1984, p47). In this context, the political differences between capitalism and communism seem fairly superficial; both are committed to a "materialist ethic", alongside unimpeded technological and industrial development, as "the best means of meeting human needs" (Porritt, 1984, p44).

'Progress' is the word most often invoked to name this constellation of ideas, and its concomitant assumption that nature is there to be conquered for human instrumental ends. Within this ideological construct, the future "is seen to offer no more than a continuation of the present" (Porritt, 1984, p194), only bigger, brighter, and perhaps spread more equitably across the planet. Within the limits paradigm, it would seem that this future has been decisively derailed. If, as the authors of *The Limits to Growth* insist, the earth itself is finite, if it has a "limited carrying capacity (for pollution), productive capacity (for resources...), and absorbent capacity (pollution)" (Dobson, 1995, p16), then the continuous growth at the heart of industrial ideologies of progress is impossible. Its realisation in the West has already brought the global system dangerously close to natural thresholds, and its export to less developed and newly industrialising countries threatens to push the world system over them. In short, the limits discourse stands in blunt opposition to the taken-for-granted assumption of inexhaustible progress that has framed Western ideas of the future in recent history. From the point of view of the limits paradigm, our current way of life will either be brought to an abrupt end as we approach the thresholds of ecological stability, or human societies must take the conscious decision to make monumental changes before the consequences of limits become apparent. Whether catastrophic or voluntary, radical social change is inevitable. The future in this discourse is therefore transformed into a site of discontinuity and dislocation, in contrast with the apparent continuities and certainties offered by industrial ideologies.

This insistence on natural limits and its critique of the taken-for-granted assumption of continual economic expansion sets the 'apocalyptic horizon' of the

future in environmental discourse. Eventually and inevitably, the path to the future shaped by 'progress' will hit head on the conditions that render its continuation impossible. The following sections explore the stark conceptual and rhetorical differences between the future storylines of the limits and the sustainable development paradigms.

'Overshoot and collapse': no-future rhetorics in *The Limits to Growth*

As I have argued above, sustainable development discourse rests on its realist diagnosis of the world environment-development problematic, but its 'cognitive appeal' lies in its elaboration of a systematic, global paradigm for a solution. In contrast, the ethical power of *The Limits to Growth* lies not in its proposed solutions (which are implicit, vague and contradictory), but in the overwhelming gravity of its diagnosis. Where the Brundtland Report speaks optimistically to 'our common future', the Report of the Club of Rome dwells uncomfortably on our common predicament. Its self-conscious purpose is to stimulate debate about the state of the world (via an admittedly incomplete and oversimplified model) rather than suggest alternatives (Meadows et al, 1972, p21 *inter alia*; see also Hajer, 1995, pp82-83). The computer runs enable the construction of a dystopian horizon of 'overshoot and collapse' that transform the discursive future from a space of openness and possibility into a device which underpins a series of warnings and predictions. The future takes on a functional relationship to the present, in the guise of a catalyst for immediate social change.

The overwhelming contribution of *The Limits to Growth* to ecological discourse has been "a vocabulary of doom and gloom", rich in metaphors of collapse, death, and decay (Dryzek, 1997, p36; see also Dobson, 1995). The idea of 'overshoot and collapse' pervades the conceptual presentation of *The Limits to Growth's* case, and this rhetorical strategy above all others functions as a compact signifier of the urgency of the environmental crisis. Dryzek points out that the idea of 'overshoot and collapse' is drawn "from models of simple ecosystems where one

species breeds to excess and then experiences a crash” (Dryzek, 1997, p36; see also the ecosystem example in Meadows et al, 1972, p92). In particular, it is the concept of exponential growth which

explains the vision of sudden catastrophic crisis in much green rhetoric and the alarmism in the face of apparently easily containable problems that many greens are criticized for.

(Martell, 1994, p31)

The limits discourse did not just draw upon an existing Western cultural repertoire of images of the end of the world, whether religious, millennial, dystopian, or the strong current of post-holocaust scenarios prevalent in the science fiction of the fifties and sixties, it reconfigured them. As Andrew Ross has pointed out, it made available to public consciousness the spectre of a new “dark eco-future” (1991, p171) predicated upon gradual deterioration:

Consciousness about the ‘recession’ of the future qualitatively shifted when the prospect of swift nuclear annihilation was replaced by the relatively slower and more painful prospect of ecological collapse.

(Ross 1991 p186).

The ‘big bang’ was gradually displaced by tropes of creeping catastrophe, in which slowly but surely all our familiar ways of life, and life support systems, would buckle and break, triggered by the ways in which our future development paths inexorably encroached and then trespassed on immovable natural limits.¹⁰ *The Limits to Growth* and its associated discourses, then, constructed a rhetorical package that told an old apocalyptic story in a new way. Its primary object was to convey the urgency of the situation, and to confront the Western ideology of progress with images of growth - the lily pond, the creeping cancer, the

¹⁰This narrative of the future as slow, creeping catastrophe has had a history in environmental discourse since at least Rachel Carson’s *Silent Spring* (1965), which paints a picture of smalltown

population bomb, overshoot and collapse - that questioned its logic and graphically illustrated its likely ecological outcomes.

The focus on diagnosis rather than solution in *The Limits to Growth* created a space for the consideration of the future of nature-society that was soon filled from within green discourse (see Dryzek, 1997; Eckersley, 1992). In particular, the politically authoritarian environmentalism that Eckersley calls 'survivalism' swiftly colonised the post-limits future. The construction of the ecological crisis as one of survival emerges as a dominant storyline in ecopolitics in the early seventies, and as a direct response to *The Limits to Growth*.¹¹ Its narrative is shaped around a recognition of the urgency of the ecological crisis and the need to present a strong challenge to 'business as usual' complacency and the expansionist ethos of late industrial capitalism. The composite argument of green survivalism maintained that if the human race was to survive impending ecological catastrophes, external (that is, statist and authoritarian) limits would have to be imposed on the inherent tendency of both human subjects and social and economic institutions to look only to short term, material satisfactions in the shape of consumption and economic growth. It rested on an essentially self-interested model of human nature. As in *The Limits to Growth*, a global perspective dominates and the 'common fate' of humanity is the focus of urgent concern; unlike *The Limits to Growth*, hierarchical control, coercion, and increased centralisation were seen as the most appropriate means of response:

Gone were the heady New Left calls for freedom, citizen participation, and the 'good life'. In their stead came sober discussions of resource rationing, increasing government intervention, centralization, and population control.

(Eckersley, 1992, p13)

America blighted and deadened by the fallout of industrial production.

¹¹Key theorists here would include Robert Heilbroner, Garret Hardin and William Ophuls - see Eckersley, 1992, Ch 1 for a fuller discussion and references.

Survivalism responded to the news of ecological limits to growth by insisting that the imposition of authoritarian social limits were the only guarantee of ecological sustainability and social stability. In doing so, it used the threat of an unstable or unimaginable future to thoroughly restrict the space in which that very future could itself be imagined. The physical limits to growth are replaced by much tighter socio-political ones, seen through the narrow lens of authoritarian centralisation.

The survivalist discourse seems to confirm the ‘apocalyptic horizon’ of ecological discourse. The redemption it envisaged consists simply in averting catastrophe, and the discourse is primarily constituted around a last-ditch attempt to preserve a future - any future at all - within the apocalyptic grounds of the limits argument. The threat of no future produces as its logical consequence a future envisaged in terms of rigid control and the centralisation of power under the aegis of the state or the expertise of élites. The scope of a different future, under the dystopian shadow of ‘overshoot and collapse’, shrinks to the possibilities for the rational, even draconian, management of scarce resources. As Torgerson has shown, this contrast was forcefully illustrated in the BBC’s film version of *The Limits to Growth*:

The film opens with chaotic images of pollution and destruction, a voice-over depicting the potential catastrophic collapse of the world system and accompanying music from Wagner. Suddenly, the turbulence recedes; the scene becomes calm, quiet, opening on to a clean, bright room: the computer comes into view as the solution, the saviour.¹²

(Torgerson, 1995, p9)

However, some indicators of more positive and emancipatory future directions do emerge from the Club of Rome’s report. As Hajer has observed, the ‘definition of

¹²According to Torgerson, the film was produced by the BBC and widely used by environment groups throughout the seventies (Torgerson, 1995, p18n).

the problem' so dramatically set out in *The Limits to Growth* also went a long way towards intimating a desired solution (Hajer 1995 pp82-83). The obvious corollary to the natural limits to economic growth is the possibility of global stability, or equilibrium. The antithesis to progress that undermines its own resource base is a social and economic system that is sustainable. And indeed, the Club of Rome's report uses the word 'sustainability' in something like a 'dictionary' sense: to enable something to last, or keep going continuously (OED). At this stage of environmental discourse, we might see the term 'sustainability' as working in a purely denotative sense, in contrast to the connotations the term picks up as the ecopolitical paradigm begins to shift towards sustainable development. In *The Limits to Growth*, 'sustainable' is used first in respect to the quantitative dimensions of ecological economic stability (Meadows et al, 1972, p24). It signifies the physical impossibility that exponential rates of population and fixed capital growth can be sustained (Meadows et al, 1972, p44). In the last couple of references to sustainability in *The Limits to Growth*, the more recent usage of the term begins to be broached, and "sustainable" is used to indicate a goal or preference for a social system, and finally to signify a state of global equilibrium that is "built to last for generations" (Meadows et al, 1972, p158 and p188).

As Torgerson notes, *The Limits to Growth* offers tantalising hints of the possibilities for human well-being and self-realisation within a stable or static economy. It does so by quoting from Mill's *The Principles of Political Economy* (1848) to the effect that a stable-state economic system need not be overwhelmingly associated with the stagnation of human development. Rather than treating growth as an end in itself, Mill suggests that the achievement of a moderate level of material growth in fact liberates human societies to focus on equitable distribution rather than production, and to debate and realise the good life (the 'Art of Living') for human beings. Thus the limits paradigm paved the way for radical ecopolitical theory to make the case that a truly sustainable future could only rest on a thorough rewriting of Western philosophy and its material

and social outcomes, such that social forms could be detached once and for all from the commitment to constant growth. One of the first expressions of this new stake in the future was *The Ecologist's* 'A Blueprint for Survival' (1972), noted above. The utopian emancipatory ecocentric discourse that grew out of this moment in environmentalist history will be discussed at length in Chapter 3.

However, *The Limits to Growth* does not elaborate on this utopian vision of radical social change, opting simply for the hope of a secure future. Torgerson argues that while the Report uses references to Mill to offer "images of vitality and dynamism within the context of an equilibrium state", it is deliberately sketchy about the "world of nongrowth" that might succeed industrialism (Meadows et al, 1972, p170; see also p180). The rhetorical power of its emancipatory future is also diminished by the Report's positivist epistemology. Its methodology is limited to purely quantifiable and aggregated inputs, and the contours of the future that emerges from its extrapolative design are decisively marked by the technocratic and administrative approach symbolised by the computer in the quote from Torgerson above. Thus, the "attractive prospect of a progressive future" is subordinated to "the distinctly more modest aim of avoiding a threatened global catastrophe". Like the survivalist discourse it generated, *The Limits to Growth* offered "not a dream of utopia but the hope of a secure order" (Torgerson, 1995, p9), over which the shadow of apocalypse continued to hang. Viewed against the background of the dominance of limits talk, one might argue that the Brundtland Report was lucky to wrest any positive sense of the future at all from its damning diagnosis of the global environment-development problematic. Like the Club of Rome's, the Commission's terms were framed around ongoing or imminent crises of nature and society; the prospects for the future were at best uncertain, at worst intimidating. Houdini-like, it emerged from its task with an optimistic, even utopian, future vision. In this respect, and apparently successfully, it rid public debate of the spectre of imminent collapse, of the ghost of a future that was no future at all.

Sustainable development: recouping a liveable future

In contrast with the assumptions of both *The Limits to Growth* and the survivalist discourse that emerged in its wake, the political roots of sustainable development lie in the social democratic tradition, albeit with strong leanings towards state and global planning (Hajer, 1995, pp99-100). But sustainable development cannot be defined in relation to limits arguments solely as a “competing discourse” (Dryzek, 1997, p43). In important ways, the construction of the concept of sustainable development in *Our Common Future* simultaneously depends on and modifies the notion of physical limits to economic growth. And in relation to both of these dimensions, it is engaged in re-thinking possible futures outside the sterile binary of grim catastrophism and tightly managed stability.

As Yearley has noted, there is a “special sense of physical... penalty attached to non-compliance” hanging over the Brundtland Report’s advocacy of sustainable development:

The argument is not just that ‘we’ ought to live sustainably, but that in the long run we cannot live any other way. It is, so the argument runs, objectively necessary to become sustainable. It is an inescapable, global imperative.

(Yearley, 1996, p133)

The argument for the objective, global necessity of sustainability in Brundtland rests on the limits case, and therefore draws implicitly on its dystopian and catastrophic ‘warning’ scenarios. Although they play a minor role in its rhetorical strategy, limits appear in *Our Common Future* in a recognisable form,

speaking directly about the survival of the earth's biospherical system:

There are thresholds that cannot be crossed without endangering the basic integrity of the system. Today we are close to many of these thresholds...

(WCED, 1986, pp32-33)

Similarly, the Report appears to acknowledge that technology can only “enhance the carrying capacity of the resource base”, not extend its life (WCED, 1986, p45). However, the *absolute* status of physical limits in the Club of Rome's reports is subtly eroded in *Our Common Future*. Firstly, and despite its aspiration to provide a foundation for global planning solutions to the environmental crisis, *Our Common Future* disentangles the quantifiable variables treated as inherently interrelated in *The Limits to Growth*. Environmental limits emerge as empirical facts of specific ecological and economic systems, rather than a conceptual framework for understanding systemic truths about exponential growth on a finite planet. In the Brundtland Report, limits themselves are disaggregated:

Growth has no set limit in terms of population or resource use beyond which lies ecological disaster. *Different limits hold* for the use of energy, materials, water and land.

(WCED, 1986, p45; my italics)

In place of the ‘overshoot and collapse’ of *The Limits to Growth* is the assertion that the reaching of limits is unlikely to manifest itself as a sudden and apocalyptic loss of resource base; more likely is a scenario of slow social and environmental decline in particular (geographical or social) areas, in the form of “rising costs and diminishing returns” (WCED, 1986, p45). As John Dryzek puts it, whilst survivalists see “problems in terms of global limits and solutions in terms of global management”, in sustainable development discourse “[p]articular resources and systems can be used and developed more or less wisely, imposing more or less environmental stress” (Dryzek, 1997, p129).

Secondly, the Brundtland Report substitutes the *social* limits to economic growth called for in limits discourse for the physical limits themselves; in *Our Common Future*, limits increasingly come to be defined in relation to the concept of the needs of future generations (see for example WCED, 1986, p82). This substitution changes the future horizon of environmental discourse from the temporally absolute (if in practice unpredictable) constraints of limits to a dynamic and shifting focus on successive future generations. In this construction, the quantitative and physical aspects of limits to growth are de-emphasised, and a version of limits as qualitative, mutable and social takes centre stage, as in this example:

If industrial development is to be sustainable over the long term, it will have to change radically in terms of the quality of that development, particularly in the developed countries. But this is not to suggest that industrialization has reached a *quantitative* limit, particularly in developing countries.

(WCED, 1986, p213)

Once the absolute and total limits to growth of the Club of Rome's formulation have been disaggregated and made partial, social and mutable, limits come to be framed as serious but negotiable constraints through which a new approach to growth can be built: a dangerous and grave obstacle course, rather than the monolithic 'apocalyptic horizon' of *The Limits to Growth*.¹³ The Club of Rome's future is envisaged largely in terms of what lies beyond the collision of our social and economic systems with absolute physical limits to growth; the Brundtland Report takes a more incremental approach. In *Our Common Future*, the discourse of limits gives way to a less absolute and dramatic, more cautious and optimistic

¹³Sachs makes the parallel point in his essay 'Environment and Development: The Story of a Dangerous Liaison', first published in Sachs 1992, reprinted in Sachs 1999. He argues that growing awareness of technological flexibility in the late 70s produced a new construction of the environmental crisis such that "the 'limits to growth' are no longer seen as an insurmountable barrier blocking the surge of growth, but as discrete obstacles forcing the flow to take a different

vocabulary of ‘development paths’. This trope is key to the Brundtland Report’s rhetorical construction of its ‘common future’.

The key difference between *The Limits to Growth* and *Our Common Future* is that the former sets out its problematic in terms of a zero-sum game, whilst the latter adjusts those terms to produce the possibility of a ‘win-win’ solution. Its rhetorical strategy and metaphorical range reflects this optimism. The Brundtland Report relies heavily on a vocabulary of new “development paths” that might lead out of social inequality and environmental decline and into stable future via the ‘virtuous circle’ of ecological security and economic growth. Within the limits paradigm, growth and ecological security are mutually exclusive; the pursuit of either guarantees the deterioration of its opposite. This produces a polarised orientation towards the future: whilst urgent and radical social change can guarantee environmental quality, continued economic growth will bring about ecological collapse. The Brundtland Report brings the two opposing variables together onto a middle ground, and it does so by blurring the lines between absolute physical limits and the ‘social’ limits to growth that might prevent us from crossing them. Hence its ability to recoup a more cautious, modest and reformist future from the extremes of catastrophe and radical social change proposed in *The Limits to Growth* - its ability to “point out some pathways to the future”; that is, to identify sustainable as opposed to unsustainable routes, and divert development traffic onto the former and away from the latter (WCED 1986 p309).

The Brundtland Report owes a debt to *The Limits to Growth* in a one final way, however. That the Club of Rome’s model opened the door to speculation about a radically different post-industrial future is undeniable. The limits paradigm effected a conceptual and narrative break with the overriding conception of the future in terms of unrelenting progress. Despite the brief dominance of survivalist discourses, the space it created for a new image of the future was soon

route.” (Sachs, 1999, p60)

occupied, expanded and intensified by a range of radical ecological philosophies, explored in the next chapter. These arguments used *The Limits to Growth's* critique of economic progress to build on the glimpse of a stable-state utopia suggested by Mill's vision, envisaging in a multitude of ways both ecological security and an enhanced conception of human well-being. On the other hand, the globalising, technocentric and scientific epistemology of *The Limits to Growth* was emptied of its radical challenge to industrial ideology and moulded into the reformist and policy-oriented shape of sustainable development. *The Limits to Growth* articulated the methodology and rhetoric that was to become central to the extrapolative, systems-oriented environmental management paradigm inherited by sustainable development.

SUSTAINABLE DEVELOPMENT: THE COLONISATION OF THE FUTURE

In this section we move on from the legacy of limits to consider the limits of sustainable development discourse itself in its attempt to formulate a pragmatic and widely acceptable programme for the future of environment and society. The key to this critique is an essentially 'culturalist' problematisation of the naïve epistemological realism and technocratic policy orientations of sustainable development. A subsidiary critique addresses the ways in which sustainable development discourse has re-introduced economic growth as a necessary and desirable factor in ecological security. These two strands are often comprehensively and even intrinsically interrelated (see for example Sachs 1999; Shiva 1996). One might argue, for example, that the reality of late modernity consists in a highly managed form of industrial capitalism, and that both the expansionist and the administrative impulses arise from the institutions and ideologies of modernity itself. For analytical clarity, however, I will treat them separately here. I take the 'culturalist' critique to be distinctive insofar as it primarily addresses the forms through which sustainable development discourse constructs the future and how to get there. It attacks the ontological realism of policy sustainable development discourse's understanding of 'nature' and the

relationship(s) between human beings and their environment(s), and its commitment to rational instrumental procedures for 'modernising' its way out of environmental crisis. Critiques of the ease with which sustainable development, and the Brundtland Report in particular, has assimilated a commitment to global economic growth, on the other hand, are distinctive mainly insofar as they address the 'content' of the proposed future. As if the limits to growth debate never happened, the most radical critics of sustainable development accuse the policy-oriented discourse of writing environment, global equity and quality of life out of the sustainability equation, so that only growth itself is to be sustained.

Getting growth back in

The most significant difference between solutions to the environmental problematic offered by the limits paradigm and those articulated in sustainable development discourse is that sustainable development explicitly and deliberately welcomes economic growth back in. In *Our Common Future*, development and ecological integrity are characterised as two sides of the same coin, and indeed the environmental crisis itself provides the motivation for enhanced economic development, the 'new era of growth' called for in the Brundtland Report. Conversely, only economic growth can create and guarantee the resources that are essential to environmental security (Glasbergen and Blowers, 1995, p173). The "revival" of growth sought in sustainable development, however, is not simply understood in terms of quantitative expansion; a change in the *quality* of growth is at the heart of its 'win-win' scenario. The Brundtland Report, then, is concerned not just with a formula for "meeting the basic needs of all", but also with "extending to all the opportunity to fulfil their aspirations to a better life" (WCED, 1986, p8). Economic expansion is not to be pursued for its own sake, but as a way of meeting human needs in their "broadest sense", embracing welfare and quality of life issues alongside environmental care (WCED, 1986,). These needs are, of course, most pressing in relation to the position of the poorer developing countries of the South. The Brundtland Report makes a commitment

to intra- as well as intergenerational equity, and material issues of employment, food security and energy in the South are high on the sustainable development agenda, alongside the qualitative issues of water, housing, sanitation and healthcare (WCED, 1986, p65). Policy sustainable development discourses make the case that the international economy can be made to benefit all involved (WCED, 1986, p67) through a revision of the terms of trade in favour of developing countries, technology transfer, and infrastructure support - provided that economic activity pays proper attention to ecosystem support and environmental quality (WCED, 1986, pp75-76).

Many ecological critics, however, have argued that far from successfully reconciling green issues and development, the Brundtland Report succeeds only in subordinating environmental integrity to economic growth. For radical ecological theorists like Sachs and Merchant, “true” sustainability is about reproduction and sufficiency: the “reproduction of life through the fulfilment of human needs and the preservation of local ecosystems” and an ethic of ‘enough’ rather than ‘more’ (Merchant, 1992, pp13-14); Sachs, 1999; see also Shiva, 1992, and Redclift, 1996). Policy discourses of sustainable development, on the other hand, maintain a commitment to production for profit as the driving force of development, and do little to address capitalism’s consumerist ethos. A commitment to quantitative economic growth (at a suggested rate of 3-4% per annum) remains the centre of Brundtland’s prescription for the future (WCED, 1986, p45). Thus for many commentators, the confident claims of advocates of sustainable development to have identified a ‘win-win’ formula in response to the environment-development problematic look increasingly like “rhetorical ploys” that try to “reconcile the irreconcilable” (Hajer, 1997, p34). In principle, the limits paradigm suggests that ecological security and economic growth are simply incompatible. In practice, the tension between green aspirations and the material and ideological factors driving expansion will be resolved in favour of international capital every time. Sustainable development, for these critics, represents business as usual with a green twist for industrial production. For

Sachs, the concept of sustainable development is an “oxymoron” obscuring “deep political and ethical controversies” (Sachs, 1999, p76; see also Redclift, 1996, p47), the most important of which arise from the assumption that ‘growth is good’ built into the foundational assumptions of policy sustainable development discourse.

A related point in the green critique of sustainable development discourse holds that economic growth does not simply militate against environmental security, but threatens to damage the conditions for quality of life. Radical critiques of sustainable development focus on its assumption, alongside dominant Western ideologies of progress, that ‘development’ is the key to human well-being. As we have seen, *Our Common Future* characterises economic growth as a means to the end of a more equitable and ecologically secure life for all. However, many theorists argue that in fact ‘development’ itself is responsible for both material poverty and for systematically undermining human quality of life and well-being in its broadest sense. On this reading, development is not the unquestionable good implied in policy sustainable development discourse, but rather a particular (Western) worldview with a specific history rooted in imperialism and crystallised as an international project in the post-war period (Sachs, 1999, pp27-29). Critics of ‘developmentalism’ argue that the insistent commodification and rationalisation of both human and natural resources under the aegis of ‘development’ both removes people from a more fulfilling life rooted in local environments *and* destroys the possibility of a subsistence-based livelihood (see Sachs, 1999; Shiva, 1992). Non-Western societies are potentially better off by staying out of the international “development race” and instead pursuing subsistence and ecological security within diverse ‘cultures of sufficiency’, resisting the material and ideological “mono-cultures” of global capitalism. Western societies would be well-advised to dismantle the structures and mantras of expansionism and explore the possibilities for human self-realisation and social welfare beyond them (Sachs, 1999, p73 *inter alia*; Shiva, 1993). The growth

economy is simultaneously a threat to nature and to social justice and human well-being.

The case against 'development' is a complex and varied one whose full exploration lies beyond the scope of this thesis.¹⁴ I include a brief discussion here to point up a straightforward but crucial assumption of the post-Brundtland model of sustainability: it restricts its vision of the future to one based on linear economic growth. Unlike the disjuncture or discontinuity with the ideology of progress mooted in the limits paradigm, sustainable development offers a picture of the future that continues smoothly along the lines of development that now mark out the path of global capitalism. What "falls by the wayside" in this paradigm are "efforts to elucidate the much broader range of futures open to societies that limit their levels of material output" (Sachs, 1999, p68). The idea of sustainability as sufficiency or reproduction has been left out of the equation. For many ecological critics, this narrow conception of sustainability is locked into the very worldview that has produced the twin crises of environment and development.

Sustainability as efficiency: the cultural critique

I have argued above that sustainable development discourse significantly diverges from the absolute concept of limits elaborated in the Club of Rome's report by reintroducing economic growth as a vital factor in its vision of a sustainable future. However, there is an important continuity between *Our Common Future* and *The Limits to Growth*. The main institutional legacy of the Club of Rome's report has been the adoption of a global and systemic approach to the environmental problematic, and above all its technocratic assumption that the

¹⁴I have also by-passed arguments from the opposite position - that is, that far from privileging growth over the environment, the Brundtland Report and subsequent Rio conference of 1991 in fact subordinated the basic and urgent need of the South for development to an over-riding concern with green issues. As Middleton et al put it, "[b]y advancing an environmental agenda, the North has once more concentrated on its own interests and has called them 'globalism'" (1992, p5).

world can 'manage' its way out of the crisis. In this respect, the emergence of the computer as 'saviour' at the end of the film of *The Limits to Growth* (see the quote from Torgerson, above) is no coincidence. Methodologically, the large-scale systems modelling made possible by sophisticated information technology is at the heart of *The Limits to Growth*, and its assumptions continue to underpin the conceptualisation of the environmental problematic in sustainable development discourse. The computer symbolises some of the main discursive tropes and policy aspirations of the Brundtland Report: rational calculation and planning, the privileging of quantitative data, and the possibility of monitoring global bio-physical systems. The outcome of this perspective has been the narrowing of the scope of the future around the concerns of an instrumental rationality, and its consequent dislocation from the moral and political engagements so forcefully expressed in the first wave of political ecological critique.

The instrumentalism and administrative orientation of policy-related sustainable development discourse is partly a result of its development in particular institutional settings. A number of commentators, usually critical, occasionally positive, have argued that it is produced by the distinctive actor networks or "discourse-coalitions" that have formed around the distinctive story-line of ecological modernisation; issues around the reflexivity (or otherwise) of modern institutions, and the professionalisation of the environmental movement are central here.¹⁵ However, here I focus on the technocentric approach at the heart of the Brundtland Report itself. As more than one critic has pointed out (Clark 1989; Sachs 1999), the conceptual core of *Our Common Future* is the identification of "a new reality" which must be "recognised and managed" (WCED, 1986, p1). The 'presumed ontological truth' that founds sustainable

¹⁵For a review of these arguments, see Hajer 1995 and 1996, who emphasises discourse over actors; Andrew Jamison (1996) and Phil McManus (1996), who broadly see the radical environmental critique as having been coopted by institutional and capitalist interests, facilitated by the forging of new coalitions between newly bureaucratised NGOs, administrative elites, and corporate management; and Klaus Eder (1996), for a positive reading of the incorporation of the green message into the institutions of democratic modernity.

development's claims to policy hegemony indexes the 'realist' or 'physicalist' construction of the ecological crisis in sustainable development discourse. This model conceives of the environmental problematic as if its meanings were external to us, an aspect of objective reality awaiting expert discovery. It assumes that the environment exists "simply as a material substrate of the social, defined by scientific enquiry" (Szerszynski et al, 1996, pp1-2). It proceeds on the basis that the insights yielded by a correct conceptual approach (ie sustainable development itself) and the application of relevant scientific procedures can be unproblematically acted upon. It generates an approach to the future of environment-society relationship that relies on objective, empirical and quantitative methods to diagnose the problem and establish the steps that should be taken to ameliorate it (McNaghten et al, 1995, p10). As we have seen in Hajer's work, however, a social constructionist approach alerts us to the problems inevitably involved in treating any particular storyline of the environmental crisis as self-evidently 'real'. Similarly, the 'paradigm shift' in environmental discourses from the limits to growth to sustainable development illustrates the contingent historical dynamics involved in our changing understandings of the environment-development problematic. Both of these contrasting storylines legitimate themselves with reference to an apparently indisputable bio-physical reality. In this context, the realism of the Brundtland Report must be treated as a framing assumption of sustainable development discourse, and its limits and problems examined.

The call for environmental management in Brundtland is not a new one. It draws (unreflexively) on a long tradition of the idea of stewardship in environmental thinking. The notion of humanity's simultaneously humble and hubristic role as 'nature's steward' came into sharp focus in the context of conflicting approaches to US nature conservation in the nineteenth century. On one side, Gifford Pinchot of the US Forest Service is taken to be the archetypal example of an orientation towards the conservation of nature *for* development, as against the Sierra Club's John Muir's impulse to preserve nature *from* development (Devall and Sessions,

1982, pp132-138). The two contrasting approaches have continued to inform anthropocentric attitudes towards human relationships with nonhuman nature; both, however, imply the inevitability of human intervention in natural environments, and evince an unshakeable confidence that such intervention can be undertaken rationally and wisely. The Brundtland Report's concept of sustainable development sits somewhat uncomfortably between these two poles. In practice, however, and due to its ultimate commitment to economic development, it relies on Pinchot's formulation in relation to the conservation of environmental stocks for the anticipated use of future generations. In this sense, Brundtland takes the rational resource management advocated by Pinchot in relation to relatively small scale and demarcated wildlife areas, and applies it on a global scale which necessitates a shift in quality as well as scale. The wise management of natural resources becomes the objective of a sophisticated and complex ensemble of modern institutions and practices. In the context of a globalised modernity, the application of rational administration beyond the social and into the sphere of nonhuman nature might suggest an all-encompassing colonisation of all aspects of life.

As well as the biophysical challenges of global ecosystem management, *Our Common Future* envisages the rational management of modern political institutions to secure sustainable development. The main policy recommendations of the Brundtland Report focus on the need to integrate global decision-making to facilitate the rational management of the double-sided environment/development crisis. Specifically, Brundtland argues that economic and environmental imperatives have traditionally been handled separately within planning institutions. It calls for ecological concerns to be built into the earliest stages of economic planning and management. The narrow viewpoint of economic ministries - "too concerned with quantities of production or growth" (WCED, 1986, p10) - must be broadened to incorporate attention to the quality of economic growth (WCED, 1986, see for example pp9-10) and, in particular, its ecological impacts and consequences for human well-being.

A second element of *Our Common Future*'s administrative rationality concerns its commitment to technocentrism, manifest in its faith in a newly "appropriate" technology to address pressing environmental problems, particularly in relation to polluting production processes. This is combined with an increasing scope for scientific monitoring of the globe to provide the knowledge base on which decisions about sustainable 'development paths' can be made. The argument from *The Limits to Growth* that Promethean and technological solutions can only postpone the onset of limits, not remove their devastating social consequences, is re-routed in the discourse of sustainable development. Here, "appropriate" technology, deployed within the strategic framework of sustainable development, can indefinitely postpone the moment at which economic growth hits biophysical limits (WCED, 1986, p60):

Technologies will continue to change the social, cultural and economic fabric of nations and the world community. With careful management, new and emerging technologies offer enormous opportunities for raising productivity and living standards, for improving health and for conserving the natural resource base.

(WCED, 1986, p217)

Indeed, technology and "technological ingenuity" are seen as neutral forces in the Brundtland Report; within a benign ideological framework, they are essential to human progress (WCED, 1986, p37). Sustainable development demands an organised attempt to develop new technologies, especially in relation to renewable energy, pollution control, agricultural productivity, and industrial production processes. A good deal depends on systems for the international exchange of technological hardware and expertise ('technology transfer'), providing innovation and access to all who need it. The current situation, whereby technological knowledge, research and development is concentrated in the multi-national corporations and military infrastructures of the West, militates against the less developed countries building up an indigenous technological

infrastructure (WCED, 1986, pp87-89). Technological development, then, becomes part of the West's moral responsibility to issues of social justice in the developing world.

It is perhaps the question of global ecological monitoring, and the amassing of reliable (scientific) information on crucial aspects of the complex interactions of environment and development, that truly underscores the technocratic rationality of sustainable development discourse. The globally interrelated complexity of ecological problems - mainly pollution - underpins an argument that intensified control and monitoring measures are needed. Sources and causes of environmental degradation and pollution are "diffuse, complex and interrelated"; effects are "widespread, cumulative and chronic" (WCED, 1986, p211).¹⁶ This can be addressed, however, by global surveillance engendered by satellite and information technology, which can now "monitor the vital signs of the planet and aid humans in protecting its health" (WCED, 1986, p274). Wolfgang Sachs has repeatedly drawn attention to the realist epistemology underpinning policy-oriented sustainable development, neatly indexed in this resonant organic metaphor from *Our Common Future*.¹⁷ Its construction of the earth as a biophysical system simultaneously projects onto it an unproblematic "transnational space", so that

[i]n this way, especially within an epistemic community of scientists around the globe... a discourse has developed which constructs the planet as scientific and political object.

(Sachs, 1999, p84)

¹⁶From a much less positive point of view than that of the Brundtland Report, an attempt to offer an integration of information of global monitoring of key environmental aggregates has been strenuously and consistently made by the Worldwatch Institute, led by Lester Brown. Its annual *State of the World* reports began in 1984. Its focus on information management and monitoring global systems and aggregates links the concerns of *Our Common Future* to those of *The Limits to Growth*.

¹⁷Sachs also offers an ironic slant on Brundtland's rhetoric - "Feeling the pulse of the earth seems to be the unstated objective of a new geo-science - the planet is put under sophisticated observation like a patient in an intensive care unit." (Sachs, 1999, p84).

What Wolfgang Sachs refers to as the 'astronaut's perspective' (Sachs, 1999, p83) - the view from space, from outside the 'blue planet' - is presented as a kind of 'data provider' to enable better global management. This is exemplified in the Brundtland Report by the key scientific role played by satellites after the 1986 discovery of the ozone hole over Antarctica; archived satellite data provided a detailed record of seasonal fluctuations over the preceding decade (WCED, 1986, p275). This commitment to global surveillance is reiterated and intensified as sustainable development moves from concept to policy programme in Agenda 21 (Sachs, 1999, p84). The Brundtland Report expresses frustration with the current lack of centralization of the "wealth of data" dispersed across national governments and institutions, and the extent to which attempts to collate it have been "underfunded, undercoordinated, and inadequate to the task" (WCED, 1986, p275). The need for better, more up-to-date, and more centralized data is a constant refrain in *Our Common Future* (WCED, 1986, pp321-326, for example). Calls for more, and more sophisticated and integrated, information speaks to a future scenario constituted around the idea of 'manageable risks', and the key role of scientific and technical expertise in risk assessment and control on a global scale (WCED, 1987, p323-328). This assumption relates to the disaggregation of environmental, social and economic variables in the Brundtland Report's future scenarios, as well as its deconstruction of the conceptually unified 'limits' of the Club of Rome's report. Risks that can be broken down and assessed can, in theory, be averted or managed. The conceptual horizon of limits and risk is once again transformed into practically separable and negotiable limits. Sustainable development is dependent on both the rhetorical and practical manifestations of scientific expertise to make its solution palatable and practicable.

The closure of sustainable development discourse around management, monitoring and expertise results in the systematic elimination of heuristics, or meaning. Human society and culture appear largely as a "behavioural stimulus-response mechanism" (Szerszynski et al, 1996, p4). This reduction of the world to physical and quantifiable phenomena, transformed into the objects of an

instrumental rationality, has troubling consequences for the futures conceived within sustainability discourses. As Robin Grove-White has pointed out, the conception of sustainability in terms of 'development paths' that replace the intractable limits of limits to growth functions to imply that there are predictable and identifiable "physical trajectories" that lead directly to a secure, just and desirable sustainable future (Grove-White 1996, p278). The realist ontology of *Our Common Future* cannot disguise the fact that these 'paths' are simply discursive constructions, particular maps that claim to guide us to a particular future. The implication of this approach is that the 'mismanagement' of the ensemble of modern global environment and social interactions can be corrected by a scientific and administrative élite. This version of the programme for global sustainability fails to address the lived, culturally embedded experiences of diverse people in relation to environment, social justice and human well-being; nor does it adequately account for the relationships between them. It reduces our complex and multiple relationships to our natural and social environments to an instrumental and behaviourist conception of individuals, in which we respond unproblematically to top-down edicts which frequently bear no relationship to grounded understandings of and concerns about environmental and human quality of life issues. Human motivations and ends are conceived of in the atomistic terms of liberal individualism.

The effect of the realist paradigm is to emphasise extrapolation over action with respect to the future of environment-society relationships, and rational instrumental over culturally situated forms of knowledge in relation to our current predicament. On this reading, sustainable development is largely involved in a process of "inventing new institutional structures for managing the environment" (Redclift, 1996, p1). Current policy debates around sustainable development privilege the "material, the quantifiable, and linear causality". However, we also need to ask how sustainability is to address the "immaterial, the unquantifiable and the unpredictable" (Szerszynski et al, 1996, p9); that is, to consider the moral and political engagement with the future overlooked by Brundtland, for all its

commitment to inter- and intra-generational equity. And the consideration of the future in these terms foregrounds the question not just of how we are to get there safely, but where we are starting from, and where we want to go. That is, it necessitates a cultural engagement with multiple possible futures, not an administrative decision to settle on one sustainable ‘development path’.

In Wolfgang Sachs’ critical take on policy articulations of sustainable development, this is a future conceived in terms of criteria of formal rationality (means), when sustainable development discourse more broadly suggests that issues of values and ends are the more relevant ones. The contrasting terms ‘efficiency’ and ‘sufficiency’ make this distinction sharply (Sachs 1999).¹⁸ According to Sachs, policy sustainable development discourse focuses too narrowly on how we are to reach goals that are always already set or predetermined by the discourse. The “rational planning of planetary conditions” thus becomes the chief focus of sustainability, to the exclusion of any real acknowledgement of diverse communities, lived cultures, and “human realities”, which shrink to nothing in relation to the “overwhelming presence of the natural world” (Sachs, 1999, p84). The problem for Sachs is primarily one of international political (in)justice. Sachs focuses on how the application of the North’s administrative and ideological apparatus to a globalised environment-development problematic both neglects and materially impacts upon the cultures of sufficiency of the ‘underdeveloped’ South. That is, he argues that the meanings and ways of life that continue to exist outside the material structures and cultural conditions of Northern capitalist ideologies of progress and development offer an alternative model for sustainability. Rather than being in thrall to the instrumental strictures of efficiency, which can only reproduce its

¹⁸Sachs applies these terms explicitly to sustainable development discourse; however, as with the critique of technocentrism, the distinction between ‘ends’ and ‘means’/efficiency in environmental discourse has a longer history. This question is discussed at some length in O’Riordan’s influential 1976 text, *Environmentalism*, which articulates an early critique of the “technocentric mode” of approaching the environment, whose hallmarks are “progress, efficiency, rationality and control” (p11). O’Riordan argues that technocentric approaches can be identified by i) a Promethean optimism in relation to technological success; ii) an ideology of ‘objectivity’ or value-neutrality; and iii) its resistance to citizen participation.

own reductively quantitative logic in ever-decreasing circles, we should turn instead to cultures of sufficiency. These 'sufficient societies' offer a way of thinking about sustainable development in terms of the lived daily realities of a set of meanings and values, desires and goals, outside the hegemonic aspirations of industrialism capitalism.

For many commentators on sustainable development, the rational modernist construction of the future in policy discourses of sustainable development represents not only an abdication of ethical responsibility, but commits its practitioners to a unreliable and impractical model on which to build public participation in the process. The endless search for perfect knowledge endorsed by the Brundtland Report is part of what Adam calls the "general clamour for proof" produced in modern conditions of risk and uncertainty. And yet it is these very conditions of uncertainty that guarantee the inadequacy of such proof "in the conventional sense of empirical science" when dealing not with "static, isolated phenomena", but with

interconnected, continuously changing, dynamic situations and parameters, when the reactions are latent and invisible for long periods of time, and when the effects are manifested not in the location of perpetration but disbursed over places both near and distant.

(Adam, 1995, pp97-98)¹⁹

One of the strongest critiques of sustainable development's almost exclusive dependence on a rationalist, realist and technocentric model builds on the centrality of risk and uncertainty to the environmental problems of late modernity, as in Ulrich Beck's now ubiquitous account of 'the risk society' (Beck 1992, and especially 1995). In Beck's formulation, the environmental hazards of late industrial modernity are distinctive, indeed historically unique, insofar as

¹⁹Adam's quote here is an economical summary of Beck's delineation of the distinctive hazards produced by late modern 'risk' society in *Ecological Politics in an Age of Risk* (1995) - see especially pp76-77.

they elude the empirical perception available in everyday life (in the ways summarised in Adam's quote above). This "expropriation of the sense organs" necessitates an (institutional) "natural science objectivism about hazards" which legitimates scientific diagnoses and technological/administrative solutions such as those called for in the Brundtland Report (Beck, 1995, p75). Beck's larger argument, however, suggests that the production of (environmental) risk in late modern capitalist societies has already exceeded the capacity of the institutions, bureaucracies and procedures set up to control or contain it, including the standard procedures of an administered science and technology. These risks are a systemic by-product of industrial society itself. Indeed, it is the failure of modern 'safety states' to manage the hazards they produce which threatens to undermine their legitimacy, and with it the ostensible rationality of technocratic and administrative solutions to the environmental crisis.

In Beck's 'risk society' scenario, then, not only are present institutions incapable of coping with environmental risks, they produce and intensify them. People depend on expert institutions for the identification and control of environmental problems. Increasingly, however, they simultaneously recognise the extent to which those problems elude institutional management. Environmental risk in late modern societies, therefore, is more and more associated with people's distrust of institutional discourses and practices. Under such conditions, administrative paradigms for sustainable development are as likely to alienate citizens as empower them to participate in the making of a future around the twin goals of ecological security and the enhancement of human welfare. The argument is that our sense of environmental threat is

rooted in just those alienated and culturally disembedded and humanly unsatisfactory models of the human and social embodied in dominant discourses of response to environmental problem - the individualistic, instrumental, non-relational models framing the economic social science paradigms which have monopolised official and wider reactions.

(Szerszynski et al, 1996, p5)

Thus sustainable development, the “dominant discourse of solution” to the environment-development problematic, may “perversely be laying the foundations” of its own “ineffectuality in environmental policy” (Szerszynski et al, 1996, p5). Attempts to mobilise action in the direction of sustainable development through the application of yet more top-down, expert and administrative solutions is unlikely to yield much in the way of positive results. This problem has become particularly acute in the attempt to operationalise the sustainable development paradigm at the local level.

Sustainability as a participatory discourse: Local Agenda 21

The ‘efficiency’ critique of sustainable development discourse concerns the ways in which its technocratic and administrative focus finesses away the need for moral and political engagements with the future. However, it would be misguided to suggest that sustainable development is a monolithic and internally consistent discourse. As we have seen with reference to Hajer’s work on environmental storylines, emblems like sustainable development do not function as fixed conceptual and ideological schemas, but more like minimal and open narratives or metaphors which are mobilised, produced and reproduced through heterogeneous social processes in a range of contexts. The success of *Our Common Future* in creating a compelling storyline that made ecological security and economic development compatible prompted the question of how new sustainable development paths were to be discovered and secured in concrete contexts across the globe. The flexibility of the sustainable development narrative lends the concept resonance outside its narrowly technocratic and administrative framework. It has been interpreted in terms that suggest a much more open, reflexive and democratic orientation towards the future.

The seeds of an alternative, participatory and culturally embedded discourse of sustainable development are present, if obscure, in *Our Common Future*. The

Report sought an authentic democratic mandate that would legitimate its envisaged changes in legal frameworks and policy-making. That is, it ostensibly called for the promotion of new cultural values and models of public participation appropriate to sustainability. Sustainable development, according to Brundtland, needs

community knowledge and support, which entails greater public participation in the decisions that affect the environment. This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizens' initiatives, empowering people's organizations, and strengthening local democracy.

(WCED, 1986, p63).

This commitment to a participatory, local and democratic version of sustainability is developed and mandated in Chapter 28²⁰ of Agenda 21, the strategic policy document that arose from the UNCED conference on Sustainable Development at Rio in June 1992 (UNCED, 1993). It stresses the unique potential of local authorities, as "the level of government closest to the people" (UNCED, 1993, p233), to catalyse progress towards sustainable development, observing that the roots of environmental problems lie in "local activities" (UNCED, 1993, p233). 'Local Agenda 21' emerged as the rubric under which local authorities worldwide sought to play a crucial role in educating and mobilising participation in the implementation of sustainable development policy. Local Agenda 21, then, might be seen as a potential site for the production of an alternative to the top-down, managerial conception of sustainable development. It offers scope for the expansion or reconfiguration of the discourse to attend to issues of participation and cultural diversity in local contexts.

In the 1990s the challenge of LA21 was taken up with alacrity by a network of institutional and NGO actors, as well as local environmental campaigners, generating a new local and participatory focus in the sustainable development storyline. In 1995, Jeb Brugman of the International Council for Local Environment Initiatives (ICLEI) estimated that 300 local authorities had already taken up the challenge of Local Agenda 21, with processes for its implementation underway in 29 countries (HMSO, 1995, p20), although of course the degree of uptake has been different in different countries. The involvement of city and county councils in the UK in building a public debate on the implementation of LA21 is evidenced by, for example, the international forum on “municipal strategies for sustainability” organised by Manchester City Council in 1995. *First Steps*, the report on the forum, contains a wealth of examples of local government initiatives from around the world (HMSO 1995). UK LA21 strategies are overseen by the United Nations Association Sustainable Development Unit in association with the Community Development Association (UNA-UK, 1995).

Reviewing key documents from a relatively early stage of the institutionalisation of Local Agenda 21 makes clear that Local Agenda 21 talk is self-consciously engaged in using sustainable development discourse to attend to the local and particular, as opposed to the global and universal. The discourse also evidences a distinctive attempt to elaborate a model of change that rests upon citizen participation in sustainability issues at a local level (HMSO, 1995, p23). The expansive Brundtland conception of sustainability as a “giant plan” (HMSO, 1995, p73) becomes a “creative balance-seeking process” worked out within concrete parameters (HMSO, 1995, p69). Moreover, Local Agenda 21 actors often frame their involvement in sustainable development in terms that are explicitly oppositional to their hegemonic predecessors (see for example HMSO, 1996, p69; p100). These terms involve asserting that the local and concrete is logically prior to the global in bringing about meaningful change in the direction of sustainable development. If most people’s ‘environmental horizon’ is “very

²⁰‘Local Authorities’ Initiatives in Support of Local Agenda 21’ (UNCED 1993 p233-234).

local – the end of the street or the top of the next hill” (HMSO, 1995, p14), then grand, globalising concepts of The Environment and The Economy working harmoniously together to create the quality conditions for future quality of life can mean very little when it comes to people actually changing the way they live from the bottom up. This shift has involved, in some cases, a substantive re-orientation of the concept to foreground the integration of environmental issues into the full range of policy spheres, a stated aim of the Brundtland Report but not one addressed in much detail. In contrast, Local Agenda 21 often substitutes ‘local’ for ‘environmental’ as the key motif of sustainability, focusing on a local balance between “environmental, economic, social and community concerns” (HMSO, 1995, p125)

The local is understood as the site at which many different aspects of human welfare meet; sustainability then operates as a flexible conceptual device enabling an assessment of how well particular inflections of big systems (social, environmental, economic) provide for it. ‘Quality of life’ is the rubric under which these broader issues are usually discussed (see for example UNA-UK, 1995, Section 5). Local Agenda 21’s revaluation of the local also generates a focus on particularity and diversity, whereby sustainability must become responsive to the specific needs and aspirations of heterogeneous communities. The form of the texts referred to above points to the importance of particularity in Local Agenda 21 discourse. They do not detail a finished and final conceptual framework; instead, a logic of ‘best practice’ is used pragmatically and flexibly to streamline an approach to sustainability that is “holistic, cooperative, and integrated” (HMSO, 1995, pix). In this way, Local Agenda 21 discourse seems to resist universalising rhetorics in favour of a celebration of diversity and plurality in relation to concrete places:

[i]t is not the aim of this collection...to present a global method for implementing Local Agenda 21 which can be applied to any municipality regardless of its circumstances, but rather to provide advice and

information tailored specifically to local authorities on how they might acquire the capability to develop their own Local Agenda 21.
(HMSO, 1995, px)

Local Agenda 21 discourses have emphasised the need for meaningful local participation in devising and implementing local sustainable development policies. Local authorities are seen as the institutions which have the greatest potential to “move... environmental concern to a level where it makes sense to most people” (Porritt in UNA-UK, 1995, p10), and in consequence stimulate and enable changes in behaviour and values held to be vital to making a sustainable society. Local government is seen as the centre of local coordination around sustainability issues: they seek both to clean up their own act and to catalyse citizen participation in sustainable development through the provision of educational and informational resources to local populations, and through enhancing their responsiveness to the concerns of citizens, environmental groups and businesses in putting together a workable green agenda for their constituencies.

Expanded citizen participation can be justified on pragmatic grounds: people need to act (and be enabled to act) if sustainable development is to be secured. For Local Agenda 21 practitioners, the vision of a green and prosperous world offered by the rhetoric of sustainability can only be realised through practical everyday action. Insofar as environmental impacts are more tangible at the local level, and local authorities can discursively intensify our awareness of them, they can encourage individual responsibility and hence individual action. Thus many commentators have argued that there are good “*environmental* reasons” (Irwin et al, 1994, p333, italics in original) for local participation in the implementation of sustainability. That is, local input, knowledge and expertise are held to be a unique and vital source of the innovation necessary to devise and operationalise distinctive local sustainable development policies successfully. But Local

Agenda 21 also mobilises an expanded conception of active, participatory democracy to legitimate its claim that grass-roots change has a vital role to play in the sustainability process (see for example Porritt in *Towards Local Sustainability* UNA-UK, 1995, p10). Here, involvement in realising sustainable development is seen as extending the conditions of autonomy of action in our own lives as citizens, in contrast to the distant representative model typical of Western democracies. This is as much a matter of principle or ethics as it is pragmatism - valuable both in its own right as well as being understood, rightly or wrongly, as a guarantee of the operationalisation of sustainability. Patterson and Theobald have similarly argued that Agenda 21, and particularly Local Agenda 21, exhibit a commitment to principles of equity and subsidiarity, both of which support the pursuit of sustainability “through the twin ideals of democratization and decentralisation” (Theobald and Patterson 1995, p73).

Local Agenda 21 rhetoric, then, expands a number of themes only implicit within policy discourses of sustainable development. It pays systematic, detailed attention to the translation of global and universal policy aspirations into issues relevant to particular, local and situated contexts. More importantly, perhaps, it elaborates a distinctive model for understanding sustainable development as a participatory process which must reach out to the values and behaviours of diverse individuals. It does so by stressing pragmatic, active participation, and by mobilising liberatory discourses associated with direct participatory democracy in ways which often appear to conflict with the top-down, technocratic logics that have been criticised elsewhere in sustainability discourse. Local Agenda 21, then, seems to offer an emancipatory narrative of sustainability. Its approach to the future appears to have little to do with the extrapolative, incremental, hierarchically administered path that followed *Our Common Future*. Rather, it builds on the moral appeal of Brundtland (especially in relation to intergenerational equity) to envisage a sustainable future built on the imagination and practical action of a diverse plurality of citizens. Its rhetoric links sustainability practice at the local level to the model of grass-roots, radical, and

creative change preferred by radical ecological theory, environmental movements, and New Left political theory generally.

A number of factors compromise Local Agenda 21's distinctive picture of sustainability, however. One of the most important of these is local authorities themselves, whose embeddedness in larger political and economic structures are likely to obstruct moves towards a truly bottom-up process of sustainable development. For a number of reasons, including the introduction of Compulsory Competitive Tendering and the under-resourcing of local authorities, the local implementation of sustainability through local participation is likely to be impeded (see Theobald and Patterson, 1995; Homberg et al, 1993). This has tended to leave a good deal of the power behind sustainable development at the level of national strategies, which largely assimilate the language and goals of sustainability conceived as a top-down, administrative project (see DETR, 1999 for the current UK policy statement). Clearly, the provision of structures which might enable a commitment to citizen participation would also entail a systematic empowering of local people through the "devolution of power and resources downwards" (Redclift, 1996, p33). It is notable that the 'win-win' narrative articulated in Brundtland fails to challenge this particular manifestation of the zero sum game. Thus in institutional terms, the local currently looks to be a rather weak position from which to launch a democratic, diverse and grass-roots vision of sustainability.

More insidiously, however, the discourse of Local Agenda 21 is in subtle ways colonised by the technocratic terms of its globalising parent. In many cases, the language of local participation and stakeholding in Local Agenda 21 texts turns out on closer inspection to be rather less inclusive than it first appears. The rhetoric of Local Agenda 21 implies, for example, that information exchange is a two-way process (see for example HMSO, 1995, p167). However, with very few exceptions, Local Agenda 21 practitioners discursively construct their role as

information provider, awareness raiser and educator,²¹ a model of communication that positions the 'public' as passive consumers of information that they are nonetheless required to act upon "in the common interest" (WCED, 1986, p46). Expert knowledges are privileged over lay ones and institutions fail to recognise citizens as "information generators" (Irwin et al, 1994, p325). The local, contextualised and enculturated knowledges produced informally by individual and collective actors can be considerable, but are routinely overlooked by public institutions.²² Irwin et al suggest that this is likely to constitute a significant barrier to broadening public involvement in sustainable development issues.

McNaghten et al's study of public responses to Local Agenda 21 initiatives in Lancashire suggests that this is indeed the case. Despite itself constituting a significant and innovative re-articulation of sustainable development discourse, Local Agenda 21 talk tends to overlook or deny the extent to which its own orientation to the concept is a discursive construction, glossing its ongoing and relatively open processes of production and reproduction in favour of presenting itself as a universal truth. A distinctive aspect of Local Agenda 21 rhetoric is an insistence on separating its own 'pragmatic' approach from the theoretical abstractions of the wider discourse. Thus LA21 rhetoric often implies that the fundamental conceptualisations of sustainability have already been crystallised, and that implementation simply operationalises those concepts, reinforcing the realist paradigm underpinning sustainable development in all its policy

²¹As in this example from the *First Steps* papers: "when talking about community involvement and community participation there is a need to look at how people hear, how they *get* messages, and how we *inform* them..." (HMSO, 1995, p115; my italics). See also HMSO, 1995, p19.

²²This model appears in a similar form in *Our Common Future* (WCED, 1986, see especially pp111-114). Education is held to be key to sustainable development, which demands the provision of "knowledge and skills to help people improve their economic performance" (p111). A two-way exchange of information is partially envisaged in relation to the empowering of "vulnerable groups" (p114). Indigenous communities who remain outside global patterns of development are "repositories of vast accumulations of traditional knowledge and experience that links humanity with its ancient origins" (p114); their disappearance is a "great loss for the larger society, which could learn a great deal from their traditional skills" in sustainable management (pp114-115). Nonetheless, the paradigm of efficiency works ultimately to separate such knowledges and skills from the culture and values within which they are embedded. I will discuss a very different understanding of the 'meaning' of such 'marginal' groups via Wolfgang Sachs' work (see Sachs 1999) in the next section of critiques.

articulations. By refusing to look at its own discursive roots, Local Agenda 21 underestimates the extent to which it is framed by models of sustainability that undercut its participatory aims. The result has been a muted response to sustainability issues due to the alienating character of the realist and administrative assumptions of the discourse. McNaghten et al found that people are unwilling to frame their own concerns about environment and quality of life issues in terms of sustainable development as long as experts and officials continue to talk about it “as if it were objectively grounded, rather than being *constructed* and its meaning *negotiated* as we go along” (McNaghten et al, 1995, p80; italics in original). This mismatch between lay knowledge of environmental and social problems and the assumptions built into top-down, administrative solutions is heightened in conditions approximating those of the ‘risk society’ with its public distrust of institutions and expert science, evidence of which is plentiful in the study.

In fact, as a number of theorists have pointed out, the most positive responses to the environmental problematic have arisen from ‘solidary’ or ‘relational’ forms of individual action - that is, those arising from cultural networks and movements within civil society, rather than through formal political, economic or regional institutions (see Grove-White, 1995; Jamison, 1995; Hajer, 1996). This kind of participatory, embedded and collective action is where Local Agenda 21’s invocation of a revitalised local democracy logically leads. Instead, it is subverted by the institutional and discursive factors discussed above so that Local Agenda 21 rhetoric, like sustainable development policy discourse more widely, tends to picture the public “largely in instrumental rather than genuinely interactive terms” (McNaghten et al, 1995, p79). At worst we might accuse Local Agenda 21 of providing a smokescreen for the administrative programme envisaged by the Brundtland Report, a plank in its strategy to “inform the public and secure its support” (WCED, 1987, p326). More generously, we might say that the conceptual innovations of Local Agenda 21 simply haven’t gone far enough to tackle the realist assumptions of the underlying sustainable

development paradigm. Either way, Local Agenda 21 represents the promise of an emancipatory sustainability curtailed, and illuminates the ways in which the discourse itself is the biggest threat to Brundtland's hope of finding "a language that can reach the hearts and minds of people young and old" (WCED, 1987, xiv).

CONCLUSION

As we have seen, then, the emergence of the concept of sustainable development marked the beginning of a new storyline framing the environmental problematic in terms of ecologically cautious 'development paths', replacing the limits to growth as the dominant paradigm for imagining a different future for the relationship between nature and society. Sustainable development tells a positive, optimistic story about the mutually supportive dynamic of growth and ecological security, but one that is nonetheless compromised by its non-negotiable commitment to economic growth. The underlying realist ontology of Brundtland's diagnosis of the environment-development problem and its administrative, technocentric framework for a solution also play a significant role in closing down debates about green futures, despite the promising openings offered by Local Agenda 21. What emerges finally from policy sustainable development rhetoric is an extrapolative model of the future as managed global capitalism. The trajectory of industrial expansion is shifted sideways a little to accommodate the need for resource conservation and cleaner production, but linear progress remains the goal and our instrumental, managerial approach to nature remains intact. Indeed, in this paradigm one must ask what sustainability is supposed to be *for*, other than prolonging the life expectancy of contemporary socio-political arrangements in a minimally modified form.

As we have seen, however, the policy discourse of sustainable development that developed from *Our Common Future* has been rigorously contested. The idea of sustainability continues to function as a powerful focus around which environmental concern operates, but it has provoked a good deal of critique as

well as support for Brundtland's vision. Whilst some theorists reject the idea of 'sustainable development' outright on the grounds of its colonisation by developmental, pro-growth and managerialist concerns, others deploy it critically to maintain that a 'real' meaning of sustainability can be located outside the narrow formulations of the policy debate (see for example Redclift, 1996; Shiva, 1992; Sachs 1999; McManus, 1996). Still others remain confident that sustainable development is either flexible enough, or conceptually sound enough, to offer a solution to the environmental crisis and issues of global justice. Debates around sustainability in this broader sense suggest that the concept constantly threatens to exceed or subvert its particular inflection in policy-related discourse. Whilst the stress on continuity with current social and especially economic institutions in the Brundtland Report threatens to close down the idea of a sustainable future, contestations over the meaning of sustainable development ensure that the concept connotes a much wider range of future visions than can be accommodated by the narrow terms of its 'official' articulation.²³ In this context, sustainability should not be seen as a set of policy prescriptions and a closed, integrated plan for environment and society, but rather as a series of open contestations over its meaning and a space to discuss alternative possibilities for the future of human-natural relationships. In particular, sustainability can come to be less about the monolithic conceptions of 'environment' and 'development' that dominate the policy paradigm, and more concerned with asking nuanced and culturally embedded questions about the prospects for ethical relationships with non-human nature and nonmaterialist approaches to human well-being. Outside the policy domain, in the realm of ecopolitical philosophy, the term sustainability has been co-opted and reconstructed as the signifier for a very different approach to green futures.

²³Versions this argument can be found in McManus (1996), Torgerson (1995), Grove-White (1996) and Sachs (1999), *inter alia*.

CHAPTER THREE

Radical visions of sustainability: green political thought

The challenge of the sufficiency debate is to contribute to society's reflexion about its own well-being and to determine whether a reduced emphasis on economic expansion can enhance the quality of civilization. The question 'How much is enough?' leads without much detour to the question 'What do we want?' *Sustainability in the last instance springs from a fresh inquiry into the meaning of the good life.*

(Sachs, 1999, p186, my italics).

The language and imagery of sustainability have a life outside their narrow conception within policy-related discourses. A range of deep green theorists have appropriated the idea as a useful umbrella term for the discussion of the institutional, political and cultural outlines of the kind of society that should succeed our own. The idea of a 'sustainable society', as we have seen, has been a feature of environmental debate since at least *The Limits to Growth* (Meadows et al, 1972). The attempts of radical ecological theorists to identify and elaborate a 'true' or 'real' vision of sustainability, discussed in Chapter 2, have kept the contestation over the concept on the agenda (Shiva, 1992; Sachs, 1999; McManus, 1996). And perhaps most importantly, the idea of sustainability has been retrospectively applied to the wealth of green future visions that have been generated from across a range of radically ecocentric positions. For example, in his review of green political thought (1995), Andrew Dobson refers to the concept of sustainability relatively unproblematically¹ as the "guiding principle" of green visions of a better future society (Dobson, 1995, p72). Fundamentally rooted in the discourse of limits, these approaches differ substantially from policy discourses of sustainable development in their willingness to address precisely the breadth of political, ethical and cultural dimensions of what sustainability *means*

that are conspicuously absent from *Our Common Future*. In this context, then, sustainability comes to signify a multiplicity of attempts, all rooted in radical political ecology, to imagine the contours of a future in which ecological integrity is reconciled with the prospects for human well-being. At the heart of this radical discourse of sustainability is the concept of the limits to growth, and its consequences for the assumptions about progress and economic expansion that structure our lives (materially and ideologically) in late capitalist modernity: production and consumption, the contradictory impulses towards globalisation and local community, democracy and political participation, technology and work, and crucially, of course, our orientation towards the natural environments in which we are inextricably embedded.

This chapter looks at the green futures generated by radical ecology, paying particular attention to the philosophical orientations that underpin deep green arguments about the intrinsic value of natural environments, human self-realisation, and the relationship between the two. Ecology's holistic worldview is the foundation on which it builds proposals for the social, political, cultural, economic and spatial arrangements that would best support the protection and preservation of nonhuman nature and ensure and enhance the conditions for human well-being. The reconstruction of the values associated with sustainability marks the radical orientation of political ecology, as well as its distance from the technocratic and administrative assumptions that colonise policy versions of sustainable development. It offers an alternative paradigm within which proposals for a sustainable future might be considered.

¹He explains that the term is "now one of the most contested words in the political vocabulary", but does not pursue the implications of that observation any further (Dobson, 1995, p72).

VARIETIES OF GREEN THOUGHT

Environmentalism and ecologism

This is not to suggest, of course, that deep green political thought is a homogeneous or monolithic entity. As most of its theorists are at pains to point out (see for example Dobson, 1995; Eckersley, 1992; Dryzek 1997; Sachs 1999), ecologism is a plural and hybrid discourse encompassing a range of orientations towards the philosophy and politics of nature and society. Some incorporate elements of established political philosophies, whilst others constitute themselves around a radical break with existing ideological frameworks. Some sit comfortably side by side (strands, for instance, of ecofeminism and transpersonal ecology), whilst others have come into direct and sometimes bitter conflict (for example, the deep ecology espoused by Dave Foreman and the social ecology of Murray Bookchin; see the debate in Bookchin and Foreman, 1991). Numerous attempts to construct a typology of the various strands of green philosophy have been made, occasionally conflicting but usually overlapping. Almost all are predicated on a foundational cleavage between reformist and radical responses to the so-called environmental crisis. Influential versions of this distinction include O’Riordan’s identification of ‘technocentric’ and ‘ecocentric’ modes of environmentalism (O’Riordan, 1976); Naess’s differentiation between the ‘shallow’ and the ‘deep’ in ecological thinking (Naess 1973); Dobson’s (1995) distinction between ‘environmentalism’ and ‘ecologism’; and Eckersley’s (1992) separation of ‘anthropocentric’ and ‘ecocentric’ approaches.² There are of course differences in the precise manner in which the taxonomies are constructed and the emphasis given to various factors involved in the binary - technology, the extent to which the cause of ecological crisis can be identified with particular political systems, the relative importance of instrumental values and a culture that constructs nature mechanistically, and so on. However, the former term in each

² Milton (1996) offers a useful overview of most of the distinctions I refer to here, and a few more.

pair self-evidently suggests that minor adjustments to existing social, political and economic structures, as well as the cultural values and ideologies that underpin them, can address environmental degradation and its social consequences; clearly, the Brundtland-derived discourse of sustainability fits neatly into this reformist category. The latter suggests that prevailing institutions and ideologies are responsible for impoverishing nature and our social relationships with it, and advocate a fundamental reorganisation of our cultural dispositions and social structures. All argue that the difference between the two positions is not only one of degree, but one of kind (Dobson, 1995, p2). It is the radical strand of ecologism that underlies the alternative pictures of sustainability at issue here.

For the purposes of this chapter, it will be useful to follow Dobson's separation of 'environmentalism' from 'ecologism', and focus on the distinctive visions of sustainability engendered by the latter. As Milton points out, Dobson's characterisation is unusual in the context of green theory insofar as it makes a sharp distinction between 'environmentalism' and 'ecologism', whereas most theorists seem happy to allow the term 'environmentalism' (with appropriate modifiers) to signify the range of green political positions from reformist to radical (Milton, 1996, p76). Although Dobson's binary might initially appear somewhat confusing, it is particularly useful and robust in marking out the deep green terrain for a number of reasons. Firstly, it is general enough to encompass the range of factors that distinguish light from dark green without being so broad as to be indiscriminating. Ecologism differs from environmentalism, according to Dobson, insofar as the former has elaborated a distinctive worldview predicated on ecocentrism - that is, on the argument that moral considerability is not and should not be exclusive to humans, but rather must be extended to the rest of nonhuman nature. On this basis, ecologism has constructed a thoroughgoing critique of existing sociopolitical institutions and, equally important, long-standing cultural constellations, based on their implication in ecological degradation. This particular construction of ecologism also takes on the philosophical positions offered by ecocentrism's holistic worldview, and involves

a critique of technocentrism and the ideological commitment to material growth, but does not reduce ecologism to any one of these factors.

Secondly, Dobson's analysis remains consistently focused on the social and political implications of ecological philosophy, and as such provides an approach particularly suited to the question of what might constitute a sustainable *society*. This is a consequence of his argument that ecologism is a distinctive political ideology, on the grounds that it is rooted in a particular ontological position about the way the world is (in particular, of course, the natural world); it constructs a series of truth-claims about the 'human condition'; and it advocates a picture of a better society (Dobson, 1995, p3).³ Dobson's approach is also explicit about the ways in which deep green prescriptions for sustainability are rooted in particular constructions of nature and rational responses to the environmental crisis, rather than following unproblematically from 'nature' itself - this latter strategy has been something of a problem in other green approaches, particularly in some forms of bioregionalism (Dobson, 1995, pp24-29 and p114; see Pepper 1991 for a sometimes unreflexive account of the ways in which radical ecology models its social vision on 'natural' reality). Dobson is justifiably sceptical of arguments that rely on the idea that the natural world can be taken as a model for the human social one - so that, for example, complementary bio-diversity in nature provides a template for anti-hierarchical democracy in society, or that the diffuse characteristics of eco-systems should determine political and spatial decentralization. The 'lesson from nature' is a useful rhetorical device in the advertisement of green ideologies, and a potent symbol of the possibilities of a more satisfying and less destructive way of life, but its reasoning is conceptually sloppy and unacceptably realist/naturalist in ways that recall the elision of the natural and the political-technical spheres in policy sustainability discourse, leaving out the realm of human cultures, values and, perhaps above all, choices.

³For a fuller definition of what constitutes an identifiable ideology in this context, and an exploration of exactly how ecologism fulfils the relevant criteria, see Dobson, 1995, pp2-13.

Finally, Dobson's distinction is particularly useful (although far from novel or unique) insofar as it incorporates a robust historical dimension that allows us to identify the distinctive flowering of a properly *political* ecologism as the late sixties turned into the early seventies. Undoubtedly, 'traces' of ecocentrism, or deep green thinking, are observable prior to that period. Green theorists have identified a number of pivotal points in the development of a distinctively ecocentric discourse, among them the mid-nineteenth century North American tradition of Romantic transcendentalism (O'Riordan, 1976, Pepper, 1984, Ch 3), Romantic opposition to the industrial revolution, and critiques of the mechanistic rationalities produced by the Enlightenment.⁴ However, Dobson argues that the confluence of a specific set of factors in the early nineteen-seventies marks the beginning of the explicit development of deep green political ideologies. The three key factors are: the elaboration of a novel conceptual apparatus in the form of the limits to growth thesis; a heightened perception of the new scope and scale of environmental problems (their global spread and global interrelatedness); and the emergence of a clearly marked systemic/holistic ecological perspective in response (Dobson, 1995, p35).⁵ The resulting "interrelated and wide-ranging nature" of the green critique, Dobson argues, is "missing from its nineteenth and

⁴Examples of histories of green thought might include David Pepper's (1984) *The Roots of Modern Environmentalism*, Anna Bramwell's controversial study, *Ecology in the 20th Century* (1989) and Max Oelschlaeger's (1991) *The Idea of Wilderness*; see Vincent, 1993, for an overview of arguments about the roots of environmental philosophies.

⁵Aspects of Dobson's analysis are similar to the factors highlighted in the 'processual' approach to the development of post-war environmentalism elaborated by Ron Eyerman and Andrew Jamison (see, for example, Eyerman and Jamison, 1991, or Jamison, 1996). Their focus on the distinctive 'cognitive praxis' of environmental social movements in "carving out temporary public spaces in which ideas are combined and articulated in new ways" (Jamison, 1996, p239), points to the transformation of (biological) ecology into social or political ecological ideas in the late 1960s. The key currents of ideas assimilated and articulated by environmental actors in this period for Eyerman and Jamison overlap significantly with those identified by Dobson: a new holistic or systems worldview; a new orientation to the processes of production, centring on technology; and a democratic and participatory approach to the dissemination of expert knowledge, matched by a new focus on the importance of lay knowledge-production. Eyerman and Jamison's approach focuses on the knowledge and actor networks that comprise political ecologism as a movement; Dobson privileges the linked constellations of ideas that run through those movements. For more on the "cognitive furniture" of environmentalism, see Sachs, 1999, pp56-61.

early-twentieth century progenitors” (Dobson, 1995, p35; see also Eckersley, 1992, p8).

Sub-divisions of radical ecology

Beyond the broad separation of ecologism from environmentalism lie a number of distinctions within ecologism itself. The ‘sub-groups’ of ecocentric thought are identified, explored and compared in Eckersley’s central text in this field, *Environmentalism and Political Theory* (1992). Eckersley’s chief analytical concern is to map the contours of ecocentric political discourse, locate it in relation to a range of conventional ideological positions, and examine each of the sub-categories of radical ecologism to gauge their ‘ecocentric’ content. Her distinctions are built on the assumption that the major streams of environmental thought can be arranged along a “spectrum” that stretches from the most anthropocentric (human instrumental) positions at one end, to the most ecocentric (holistic) positions at the other (Eckersley, 1992, p33-34). Resource conservationism (conservation for human use and development; see for example the ideas associated with Gifford Pinchot in Chapter 2, above), human-welfare ecology (environmentalism as a quality of life/social justice issue, of which more below), and preservationism (associated with John Muir’s advocacy of maintaining large tracts of ‘wilderness’ for human aesthetic and spiritual appreciation; see discussion in Chapter 2) cluster at the anthropocentric end of the spectrum. In all three cases, care for the environment is advocated on the grounds of its utility for human beings, whether that utility is taken to be individual or social, material or spiritual/aesthetic.

Properly ecocentric approaches, on the other hand, argue that only by valuing nature for itself can we insure against its continued destruction. Instead of a human-centred morality, it takes a “bioethical” stance that accords moral standing to all entities and systems, human and nonhuman (O’Riordan, 1976; see also Naess, 1973, and Devall and Sessions, 1987). Thus ecocentric philosophy begins

by deconstructing the relationship that positions human beings as separate from (and usually superior to) the rest of nonhuman nature (Eckersley, 1992, pp49-55). It adopts instead a philosophical holism that understands the world, and human beings' place within it, in terms of dynamic interrelatedness. Connection and reciprocity are privileged over distance and separation, system or web over individual entities, and organic over mechanistic epistemologies. In the light of this web of connections, the construction of fixed or absolute distinctions between categories of being - human and nonhuman, animate and inanimate, discrete entities and ecosystems - is seen as illegitimate (Eckersley, 1992, p49). As Warwick Fox has put it, the "central intuition of deep ecology is that there is no firm ontological divide in the field of existence" (Fox, 1984, p194).

However, within this broad stance Eckersley distinguishes between three (complementary) strands of Western ecocentrism: autopoietic intrinsic value theory, transpersonal ecology⁶, and ecofeminism. In essence, Eckersley treats the three as somewhat divergent modes of reasoning which lead ultimately to the same place: radical ecocentrism.

Autopoietic intrinsic ethics

Autopoietic ethics refers to those elements of ecocentric philosophy that see the relationship between human societies and their environments in terms of a theory of intrinsic value (see for example Fox, 1990; Regan, 1984). The argument for intrinsic value turns on the principle of extending moral consideration to all entities, systems or processes that exhibit the property of self-renewal, that is, exist as ends in themselves (Eckersley, 1992, pp60-61; Devall and Sessions, 1985; Naess, 1973; and Stone, 1999). The contrast between this approach and the human instrumental orientation to nonhuman nature of anthropocentric

⁶Transpersonal ecology is also sometimes referred to as 'deep' ecology. However, since this term is also often used, following Naess' influential distinction, to refer to the general category of radical environmental philosophy that I call 'ecologism', I will stick to the term 'transpersonal ecology' for clarity here.

approaches will be clear. The autopoietic value approach begins with abstract ratiocination (what Eckersley calls “axiological” reasoning), and seeks to provide a sound theoretical base for ecocentrism by extending a discourse rooted in Enlightenment reason and the conceptual vocabulary of rights to nonhuman entities. Regan’s work, for example, pursues a deontological theory of ethics derived from Kant to argue that all entities that are “subjects of a life” should be accorded inherent value (Regan, 1984, p159).

Transpersonal ecology

Transpersonal ecology, on the other hand, begins with the assumption that the most powerful forms of moral obligation (to nonhuman nature, and to other humans) are built on the cultivation of a more expansive sense of the self, which rests crucially on the possibility of identification or empathy with other human and nonhuman beings. This is not an abstract and external “moral injunction”, but rather an invitation to a ‘lived’ or intuitive ethics; transpersonal ecology’s route to ecocentrism is “cosmological and psychological” (Eckersley, 1992, p61). As Devall and Sessions, foundational theorists of ‘deep’ or transpersonal ecology, put it, the “ultimate norms” of ‘deep’ ecology “cannot fully be grasped intellectually, but are ultimately experiential” (Devall and Sessions, 1985, p66). It takes a holistic view in which all entities are not simply affected by but *constituted in* their interrelationships with others, replacing what Naess calls the “man in environment” image with the “relational, total-field image” (Naess, 1973, p96). It takes a radically ecocentric line, according intrinsic value to the flourishing of all human and nonhuman life, leading to an ethics of ‘biocentric equality’ in which

all things in the biosphere have an equal right to live and blossom and reach their own individual forms of unfolding and self-realization.
(Devall and Sessions, 1985, p67).

Acting differently towards nonhuman nature involves perceiving it differently and understanding it differently, on experiencing the self as part of a much bigger, interconnected reality. Transpersonal ecology identifies wild nature as the supreme source of such experiences, drawing on a Romantic vocabulary of transcendence and the sublime. It thus privileges the individual perceiving subject over social approaches to the nature-society relationship, as well as relying on a highly 'naturalist' ontology.

Ecofeminism

Ecofeminism similarly turns on an embodied or experiential ethics, but here, the most hopeful possibility for encouraging and developing an 'ecological self' is located in the relationship between women and nature. The vexed question that faces ecofeminism is whether women are positioned differently in relation to nature compared to men because of some essential and universal quality of femininity, or because of the specific ways in which women and nature have been articulated historically, culturally and materially (see Plumwood, 1988 and 1986, and Eckersley, 1992, pp63-71, for a review of this issue). Essentialist arguments usually focus on the extent to which women's bodily (and especially reproductive) experience either materially positions women as 'part of' nature, or enables women to experience a connection with nature in a way that is unavailable to men. As Plumwood's work makes clear, essentialist ecofeminist arguments for a biological/material identification between women and nature can differ widely, and in the main include an element of cultural or social critique (see Plumwood 1986 for a review of the arguments of, for example, Mary O'Brien, Ariel Salleh, and Elizabeth Dodson Gray).

'Cultural', or nonessentialist, ecofeminist positions argue that it is a shared history of oppression, or a shared cultural position as 'Other', that situates women in a closer proximity to nature than men. Indeed, many ecofeminists argue that the devaluing of women and women's experience (as irrational, expressive,

emotional, material) is predicated on and legitimated with reference to a prior devaluation of the sphere of nature in contrast to culture (male, rational). Most of these arguments, then, identify a “shared logic of domination between the destruction of nonhuman nature and the oppression of women” (Eckersley, 1992, p64). Certainly, an association of women with the natural might be thought to underpin parallel arguments that it is women who possess or exhibit values and ways of being more appropriate to an ecocentric philosophy, such as the capacity to give life and nurture, and to relate empathetically and intuitively with other beings (see, for example, Dobson, 1995, pp186-197), traits which can clearly be attributed to either cultural/historical or biological factors, or some combination of the two. In its cultural articulations, ecofeminism offers yet another route into thinking about the changes in culture, consciousness and perception involved in adopting ecocentrism as the basis for a radically sustainable society. It opens up a route to the positive revaluation of the self-nature relationship parallel to that of transpersonal ecology. Both locate the possibilities for an ecocentric culture in changes in consciousness that embrace a holistic orientation towards nonhuman nature, and a porous sense of the boundaries between self and other.

These three approaches (autopoietic intrinsic value and the two experiential approaches, transpersonal ecology and cultural ecofeminism), constitute the truly ecocentric end of Eckersley ecophilosophical spectrum. However, two or three further positions lie outside, but close to, ecocentrism proper. These are the broadly eco-anarchist approaches that include social ecology, eco-communalism and bioregionalism. Eckersley partially excludes these positions on the grounds that they tend towards the anthropocentric end of her ecocentric continuum. Eco-anarchist approaches do draw on some form of intrinsic value theory to accord moral consideration to all aspects of nonhuman nature, and are explicitly directed towards the reformulation of the society-nature relationship. However, most ‘social’ ecological approaches also seek to reconcile a recognisable form of humanism with ecocentric arguments, or embed ‘special case’ pleading for humanity within a broad assertion of ecocentrism. The extent to which

ecocentrism and some forms of humanism might be seen as mutually exclusive has been a matter of some debate within the history of green thought, and I will return to this question in more depth in the next section of this chapter. It is enough here, however, to note the existence of a range of ecophilosophical views that lie outside Eckersley's particularly rigorous delineation of ecocentrism, approaches that would undoubtedly be included in many typologies of 'deep' or radical ecologism (for example, O'Riordan, 1976; Pepper, 1984; Dobson, 1995; Dryzek, 1997).

Social ecology

Social ecology is almost exclusively associated with the work of Murray Bookchin and is another theoretical system that draws on the 'bioethical' approach.⁷ Social ecologism treats the integrity of natural ecosystems as a "biotic right", contending that "[n]ature...contains its own 'purpose' which should be respected as a matter of ethical principle" (O'Riordan, 1976, p4; see also Pepper 1991). Social ecology builds on the bioethic to make parallels between the hierarchical and exploitative relations which exist between people in society and the human domination and exploitation of nature. Bookchin's historical analysis identifies the origins of relations of domination in the emergence of early forms of patriarchy (see for example Bookchin, 1988). The exploitation of human beings by other humans (in this case, women by men) generates an instrumental orientation to relationships, which in turn gives rise to the instrumental use and despoliation of nature. By contrast, social ecology argues that all entities and systems must be granted freedom to unfold in their own particular way, and that true equality can only thrive in conditions of diversity. The caveat, for Bookchin, is that the flowering of 'second nature' (ie humanity's evolution into culture) is qualitatively different from the rest of nature insofar as it possesses the capacity for self-consciousness. The reserving of a 'special place' for humanity is the

⁷Some key texts from Bookchin's extensive oeuvre might include: *The Ecology of Freedom* (1982); *Post-Scarcity Anarchism* (1971); *Towards an Ecological Society* (1980), *The Modern Crisis* (1984), and *Remaking Society* (1989).

grounds on which Eckersley refutes the claim of social ecology to be 'ecocentric' (Eckersley, 1992). Moreover, insofar as Bookchin takes the development of human self-consciousness to be a natural *telos*, indicative of the direction of evolution, his analysis becomes problematic. It imputes an end point to evolution or development that runs contrary to scientific readings of the evolutionary process. Most ecologists would prefer to remain agnostic about any such telos, and many would argue that it is directly contrary to the holistic ecocentric principle of letting things live and develop in their own way (Eckersley, 1992, p156). Multiple objections, of course, might be raised by more conventional social philosophy regarding the problem of teleology generally, and its uneasy alliance with human consciousness in particular.

Yet what Bookchin's analysis loses in ecocentric integrity (in Eckersley's terms) by sacrificing this 'special place' to humanity, it gains by constructing a solid and nuanced foundation from which to think explicitly about the relationships not just between 'humanity' and 'nature' (or human individuals and the 'ecological self', as in transpersonal ecology), but between historically specific social and cultural formations and the nature(s) they co-create. By beginning with the internal logic that connects all repressive natural and social relationships, rather than by outlining a free-floating or 'in principle' logic of holistic and reciprocal ecocentric selves and relationships or normative systems of intrinsic value, Bookchin's theory roots itself unshakeably in a critique of the conditions that systematically militate against the possibility of either ecocentric consciousness or the social structures of sustainability. Which may simply be to say that social ecology attends as explicitly to the historical-analytic as it does to the normative dimensions of the environmental problematic (Bookchin's theory is also profoundly utopian, as we will see shortly), and that this critical approach is well placed to address the transition from a hierarchical, repressive and ecologically damaging society to one that embodies the values of ecocentrism and enacts sustainability. This would certainly be Bookchin's own argument, as set out in his debate with Dave Foreman (of the radical campaigning organisation *Earth*

First in Defending the Earth, 1991). Bookchin's attribution of an 'in principle' distinctiveness to humanity is often viewed as the reproduction of the philosophical and ideological systems that underpin human-instrumental exploitation of nature. Read sympathetically, however, it might be seen as an attempt to acknowledge human difference whilst arguing that it must be understood in a radically different way.

Ecocommunalism

This same explicit focus on the oppressive structures of contemporary societies is found in those perspectives often called 'ecocommunal' or 'ecomonastic' (see for example Eckersley, 1992, pp161-167; Dryzek, 1997, Chapter 9; Pepper, 1991, Chapter 2). As in transpersonal ecology, ecocommunal perspectives argue for the cultivation of an ecocentric and holistic consciousness, and privilege experiential over abstract theoretical epistemological frameworks. However, ecocommunalism contends that an ecocentric outlook is best fostered not by monadic relationships between individual subjects and the natural world, but within face-to-face communities founded on autonomous interdependence and co-operation. The possibility of recovering a size, shape and quality of community that can both secure links between the people within it and be embedded more harmoniously within nonhuman nature is the primary concern of ecocommunalism. The key features of the ecocommunity include its small size, a philosophy of voluntary simplicity, and a commitment to holistic relationships.

The term 'eco-monasticism' comes into play because one of the most resonant models of social organisation in this tradition is that of the monastery and its twin ideals of withdrawal and "autonomous association" (Eckersley, 1992, p162; see also Pepper 1991 pp36-46). The monastic ideal connects ecocommunalism to an anarchist tradition of desire for spontaneous, autonomous and decentralised communities, a tradition also self-consciously espoused by Murray Bookchin (see *The Ecology of Freedom*, 1982, *inter alia*). The monastic ideal is particularly

well illustrated in the work of Rudolf Bahro (1986; 1984), former socialist, later leading 'fundamentalist' member of the German Green Party, and finally, after leaving *Die Grünen*, purveyor of a radical and spiritual vision of deep green anarchism. For Bahro, the best hope for achieving a deep green culture lies in the retreat from the materialist, instrumental and impoverished way of life of modern industrialism, and into small, self-reliant monastic communities that can nourish the human capacity for self-realisation whilst they inculcate a renewed respect for the integrity and diversity of the nonhuman natural world. Bahro's work epitomises the desire to turn away from the expansionist ethics at the heart of modern industrialism and towards an "inward journey" (Bahro, 1984, p220) that seeks a kind of human self-realisation formed in communication with a wider, organic "totality" that is common to ecocommunal approaches (Bahro, 1984, p222).

In the work of both Rudolf Bahro and Theodore Roszak (1979), the historical tendency of industrial capitalist modes of social organisation to deplete and destroy the sources of human fulfilment and spiritual development are foregrounded. The supposed authentic needs of the whole human person come first, and social forms succeed insofar as they are geared to meet those needs. A key aspect of human need and desire is held to be that for integration into a larger material and spiritual whole, such that from eco-communalist perspectives "the cultivation of human respect for nature is a necessary aspect of human psychological maturity and self-realisation" (Eckersley, 1992, p162).

Bioregionalism

Many of the ecological philosophers from within the other traditions discussed here have also embraced bioregionalist principles, which sit comfortably alongside diverse strands of ecocentric theory. Bio-regionalism might be considered the most emphatically ecocentric strand of the green philosophies that occupy the 'middle range' of Eckersley's spectrum (Eckersley, 1992, p168), and

is strongly associated with radical articulations of ecoanarchist politics. It emerged in the late seventies and early eighties in North America, and has been primarily associated with its North West coast. A bio-region denotes an area with common environmental characteristics (soil, water table, climate, plants and animals) and human cultures. Bio-regionalist philosophy espouses the embedding of human societies within biotic communities; humanity must be ordinary member rather than privileged surveyor and exploiter of the natural environment. The bio-region ('life-place') maps both "a geographical terrain and a terrain of consciousness", a "place and the ideas that have developed about how to live in that place" (Berg and Dasmann, cited in Eckersley, 1992, p176).

As such, bio-regionalism demands the development of an explicit awareness about the ecological realities of, and traditional and appropriate cultural meanings and practices associated with, very particular places. Its theorists have coined the term 'rehabitation' to connote the political project of developing a sustainable society in the aftermath of the ecological destruction and exploitation occasioned by an increasingly global commitment to 'development'. Any such society must strive to achieve harmony between ecology and society by inculcating a culture and consciousness that encourages local societies to adapt to their local ecological communities, rather than allowing disembodied, universalising social systems to be imposed upon nature conceived of as homogeneous and inert. Bio-regionalism explicitly articulates an idea of 'living-in-place' that resonates with many strands of deep green philosophy. It focuses attention on the particularity and diversity of place in its psychic and socio-cultural as well as its ecological senses.

Ecocentrism, anthropocentrism and humanism

We have seen in the previous chapter that for all its failings, the policy discourse of sustainable development attempts to reconcile the two apparently opposing principles of ecological security and human welfare (under the rubrics of 'development' and social justice). In contrast, ecocentric philosophy might

appear to reduce the scope for human well-being as it shifts the emphasis of its ethics from humanity to nonhuman nature. Indeed, statements of the ecocentric position are often explicitly conceived of in terms of their desire to displace anthropocentric (human-centred) views of the world in favour of a holistic or biocentric ontology, which suggests some conflict between human interests and those of 'nature'. This calls into question the predominant Western discourse available to us for thinking about human well-being, that is, humanism and its roots in Enlightenment rationality. Cartesian foundationalism casts humanity as the detached and perceiving subjects at the centre of the world. Does the ecocentric displacement of 'man' from the centre of the world and our knowledge of it result in the downgrading of the value of human beings, our freedom and right to self-development?

In the Enlightenment tradition, the projects associated with humanism - its liberal discourses of rights, freedom, equality and democracy - are inextricably caught up in what radical ecologists would now criticise as a fundamental anthropocentrism. They argue that it is this anthropocentrism that legitimates the human-instrumental devaluation of nonhuman nature, perpetuating the profligate exploitation of the environment.⁸ Thus Eckersley argues that ecocentrism is founded on a critique of human-centredness, and that humanism is so colonised by anthropocentric assumptions that we must relinquish it in the name of an ecocentric ethics (Eckersley, 1992, p3). In fact, ecologism as a whole has a more ambiguous and complex relationship with Enlightenment thought than this formulation suggests. Ecopolitical discourse, for many of its theorists, is characterised by an irreducibly heterogeneous character, and many of its most important insights are generated by the tensions between the contradictions that it contains (Sachs, 1999; Dobson, 1995). One of the primary dualities exhibited by deep green thought is that between its 'rational' and its 'romantic' dimensions (Dryzek, 1997; 1987). Dryzek argues that one strand of ecologism derives from

⁸For an overview, see for example Keith Thomas (1984) *Man and the Natural World 1500-1800* (London; Penguin) and David Pepper (1996) *Modern Environmentalism* (London; Routledge).

an engagement with modern discourses, seeking to recast Enlightenment values and extend its principles of equality, rights, and opposition to hierarchy to encompass nonhuman nature. Thus 'rational' ecologisms adapt conventional political philosophy⁹, attempt to work within or alongside existing political institutions and ideologies, and favour a structural model of social change. Romantic elements of ecologism, on the other hand, are characterised by their rejection of scientific and abstract modes of thought, privileging instead consciousness, emotion, experience, and culture. Their model of change is an idealistic one, with the emphasis on inviting people to a new perception of the natural world and their place within it.

Dryzek makes a sharp (and often untenable) distinction between the rational and the romantic in green political thought, and allots particular variants of ecopolitical philosophy to one box or the other - thus transpersonal ecology is 'romantic' and social ecology 'rational', for example.¹⁰ However, for most theorists the tension between rationalism and romanticism is held to characterise ecological discourse as a whole. Thus, whilst ecologism undeniably draws on abstract, rational elements, in particular in its roots in the modern science of ecosystems theory, it also encompasses a strong current of anti-modern and Romantic critique of Enlightenment reason, drawing on transcendentalist philosophy, conservative organicism, the Romantic veneration of art over science, and so on (Sachs, 1999, pp61-62; see also O'Riordan, 1976). Thus Sachs characterises ecologism as a "hybrid" discourse with an "ambivalent" relationship

⁹A useful overview of green attempts to adapt or extend Western philosophical traditions to encompass the 'rights' or 'value' of nonhuman nature (and future generations) can be found in (ed) Mark J Smith (1999) *Thinking through the environment: a reader* (London; Routledge), Section 2 and especially Section 3.

¹⁰This dualistic approach has pronounced limits, not least in its tendency to exaggerate differences *within* ecologism at the expense of marking the more important philosophical differences *between* ecologism and other human-centred ideologies. Further limitations become apparent when Dryzek addresses bioregionalism, which has to be divided into 'rational' and 'romantic' elements to fit his schema. The distinction between 'cultural' (romantic) and 'social' (rational) ecofeminism, is also rather troublesome, missing the problem of essentialism almost entirely. Dryzek's approach also occludes what many theorists would consider a more important underlying distinction, namely that between a reformist 'environmentalism' and 'ecologism'

to the Enlightenment, operating in a cultural space from which it can both critique and co-opt elements of its rationality:

the ecology movement seems to be the first anti-modernist movement attempting to justify its claims with the enemy's own means... As a movement highly suspicious of science and technical rationality, it plays anew the counter-melody that has accompanied the history of modernity ever since Romanticism. But as a science-based movement, it is capable of questioning the foundations of modernity and contesting its logic in the very name of science.

(Sachs, 1999, p61)¹¹

Similarly, Dobson asserts that radical ecologism as a whole exhibits a deconstructive scepticism towards the values and rationalities of the Enlightenment, even as it depends upon and partially embraces them. Quoting Tim Hayward, he argues that “the ecological challenge, precisely to the extent that it is a critical challenge, can be seen as a renewal of the Enlightenment project itself” (Hayward, cited in Dobson, 1995, p12). In the light of the notion that ecologism remains (critically) indebted to Enlightenment discourse, a re-evaluation of the supposed antipathy between human-centredness and ecocentrism is possible. It might be argued that Eckersley's assertion that ecocentrism is in principle incompatible with any form of humanism arises in large part from her assumption that anthropocentrism and ecocentrism operate as a mutually exclusive and reciprocally defining dualism. What is anthropocentric/humanist is by definition antithetical to ecocentrism; the switch is either on or off. As Dobson points out, this binary approach to our understanding of eco- vs human-centredness misrepresents the nature of ecopolitical theory, as

proper, as in his inclusion of European Green Parties and environmental justice campaigns alongside social ecology in the ‘rational’ category. See Dryzek 1987; 1997 esp. pp160-181.

¹¹Sachs goes on to argue, however, that ecologism's ambivalence towards science and modern rationality is its weakness as well as its strength. It is precisely its ambivalence that has enabled the “technocratic recuperation of [environmental] protest”, as we have seen in relation to policy discourses of sustainable development (Sachs, 1999, p62).

well as being profoundly unhelpful. Instead, he distinguishes between a 'strong' and 'weak' version of anthropocentrism, which in practice means a distinction between attitudes that are simply (neutrally, passively) 'human-centred' and attitudes that are (actively, aggressively) 'human-instrumental' (Dobson, 1995, pp61-71). Summarising a range of positions within the ecophilosophical literature, Dobson argues in the spirit of social constructionism that "anthropocentrism in the weak sense is an unavoidable feature of the human condition" (Dobson, 1995, p62). We are always trapped within our own material, cultural and perspectival contexts and frameworks, and the hope of valuing nature differently is in the end an inescapably human hope (see also O'Riordan, 1976).

Thus ecologism cannot avoid some aspects of the human perspective, and indeed an explicit focus on human well-being is rarely far from the concerns of the most ecocentric philosophical approaches. This is seen by Dobson as a necessary corrective to the alleged misanthropy of some strains of deep ecologism - the radically misanthropic form of transpersonal ecology subscribed to and practised by the US environmental activists *Earth First!* is the conventional scapegoat for this accusation (see Dobson, 1996, p2). In some articulations of transpersonal ecology, the centrality of the bioethic comes to legitimate a valuation of nature (and wilderness in particular) to the extent that humanity seems to recede beyond the reach of moral consideration, an approach which ironically reproduces the very *distance* between the natural and human worlds attributed to Enlightenment humanism (see for example discussions in Pepper, 1991, pp16-17; Dryzek, 1997, pp156-160).

The need for a balance between human and nonhuman interests is widely recognised in ecopolitical philosophy, albeit in different ways. Many theorists argue that whilst a 'strong' (instrumental) version of anthropocentrism is fundamentally incompatible with an ecocentric ethics, ecologism can comfortably accommodate a 'weak' and reconstructed version of Enlightenment humanism (Dobson, 1995; Dryzek, 1997 p157). As the radical ecological theorist Carolyn

Merchant suggests, an “ecocentric ethic in which all parts of the ecosystem, including human, are of equal value” and an “ecologically-modified homocentric ethic that values both social justice and social ecology” meet on the same terrain (Merchant, 1992, p11). Given her critique of anthropocentrism, outlined above, Eckersley remains resistant to the language of humanism, but specifically addresses the question of misanthropy thus:

Ecocentrism is not against humans per se or the celebration of humanity’s special forms of excellence; rather, it is against the ideology of human chauvinism. Ecocentric theorists see each human individual and each human culture as just as entitled to live and blossom as any other species, *provided* they do so in a way that is sensitive to the needs of other human individuals, and cultures, and other life-forms more generally.

(Eckersley, 1992, p56; italics in original)

The next section of this chapter examines the particular ways in which ecologism has addressed the question of what it might mean for human beings to ‘blossom’ in the context of an ecocentric philosophy.

EMANCIPATORY ECOLOGISM

Radical visions of sustainability have not simply adapted or restricted conceptions of what it means to live well to fit the tenets of political ecologism. Rather, the issues raised by ecocentrism can be viewed as having enriched philosophical debates about what might constitute the good life for human beings. The next section of this chapter will attend to how political ecologism has promised to expand rather than contract the scope for imagining the good life for human societies. I follow Eckersley’s argument that since the early 1970s, the direction of radical ecopolitical thought has been towards the drawing out of what she describes as the “emancipatory potential...latent within the ecological critique of

industrialism” (Eckersley, 1992, p18). Three phases are important here, each with a particular narrative of the environmental problematic: a ‘participatory’ phase (prior to political ecologism proper), a post-limits ‘survivalist’ phase, and a final liberatory phase. Each conceives of the future of human relationships with nature within a distinctive conceptual framework and discursive formation.

I have already addressed the main outlines of green survivalism in Chapter 2, focusing in particular on the ways in which it closed down the scope of responses to the environmental crisis around an authoritarian plan to avoid the threat of ‘overshoot and collapse’. Green survivalism built on the limits discourse to wrest the environmental narrative away from an earlier paradigm whose understanding of the ecological crisis was framed as a ‘crisis of participation’ (Eckersley, 1992, pp8-11). This radically democratic expression of environmental concern built up during the 1960s, allied to the politics of the New Left and focusing on grassroots participation, social justice, and political autonomy. Eckersley characterises the ‘participatory’ response to environmental degradation as one primarily concerned with the social distribution of environmental ‘goods’ and ‘bads’, calling into question precisely the kind of technocratic and administrative closure around social participation in decision-making that we have seen at work in the Brundtland framework for sustainable development. In this phase of the discursive construction of the environmental problematic, closely associated with the publication of Rachel Carson’s *Silent Spring* in 1962, the key problems were identified as pollution and quality of life issues. Environmentalism was largely seen as an extension of debates over civil and human rights, expressed in terms of the desirability of universal access to clean air and water, and a decent local environment as the foundation for universal access to a basic standard of quality of life (Eckersley, 1992, pp8-11).

The stress here is not on the problem of the rationality of administration and technocentrism per se, but rather on practical matters of poor planning and the issue of who was to be allowed to participate in the planning process. As such,

environmentalism in this period was largely annexed to wider questions about the distribution of social justice, and over the course of the sixties came to be treated, by political theorists and policy-makers at least, as an “adjunct of the New Left” (Eckersley, 1992, p10). The association with liberatory social democratic politics is not of itself a problematic one for environmentalism. The conjunction between humanist Marxist and New Left critiques of industrial capitalism as potentially fatal to the human psyche, and for its failure to meet authentic human needs¹², and social democratic environmentalism’s focus on quality of life issues and questions of power and distributive justice was a potent and fruitful one. Yet, as Eckersley argues, the critiques associated with participatory discourses of environmentalism rarely addressed what for radical ecologism has become the most pressing issue in relation to human social relationships with nonhuman nature: the problem of anthropocentric instrumentalism. That is, the orientation of participatory environmentalism towards the natural world works primarily around its use to human beings. Whilst it doesn’t endorse the naked and careless exploitation of nature for the needs of advanced industrial capitalism (or, more pointedly within the distributive terms of this discourse, industrial capitalists), it nonetheless places a premium on the resource and amenity values of environments (Eckersley, 1992, p9). The question is one of how resources are to be used more equitably, and how the environmental externalities associated with industrial production are to be prevented from falling on already vulnerable social and geographical groups.

The participatory response to the environmental crisis is less concerned with the content of the future, and the specifiable properties of the relationship between human societies and nonhuman nature, than with who has a participatory stake in deciding what it will be. As we have seen in Chapter 2, the policy conceptions of sustainable development that followed *Our Common Future* (WCED, 1986) are also ostensibly built on social democratic and distributional concerns about the

¹²Such as Herbert Marcuse’s *One Dimensional Man*, published in 1964, or Charles Reich’s *The Greening of America*, first published in 1972, for example.

future well-being of human beings in precarious environmental contexts. We have also seen how easily its participatory discourse has been colonised by the managerialist and technocratic assumptions that underpin its reformist agenda. This fundamental reformism is also at the heart of ‘participatory’ responses to the environmental crisis, which similarly envisages its future around the modification of ‘business as usual’. One might call it a ‘processual’ orientation to the future, in which questions of what we want it to be like are subordinated to the issue of how we get there. Alternatively, one might think of it as ‘instrumental’ insofar as its focus on means legitimates a certain amount of closure around the discussion of ends.

However, the dialectical synthesis of the participatory discourse with its survivalist antecedent, Eckersley argues, resulted in a radically emancipatory theory of the ecological crisis.¹³ Emancipatory ecologism assimilates the ecological critique of rampant industrial growth found within survivalist discourses with the social democratic orientation of participatory ones. It takes on the importance of ecological limits, and concomitant arguments for rethinking economic growth within the terms set by the physical/biological survival of the planet, but it is strongly critical of the authoritarian imposition of narrow social limits in their name. From participatory discourses it inherits a vital concern with human well-being and an orientation to the future that stresses citizen participation in the processes of decision-making that structure all aspects of our

¹³An alternative account of the origins of a distinctively emancipatory ecocentric discourse is to be found in Tim O’Riordan’s *Environmentalism* (1976). He locates the roots of ecocentrism in the ‘romantic transcendentalism’ that arose in the frontier culture of North America in the mid-nineteenth century. For the transcendentalists, O’Riordan argues, nature “enjoyed its own morality which, when understood, could lead the sympathetic and responsive human being to a new spiritual awareness of his [sic] own potential, his obligation to others, and his responsibilities to the life-supporting processes of his natural surroundings” (p3). It should be clear that the transcendentalist influence has been most strongly felt in transpersonal ecology, particularly in its experiential dimensions. Nonetheless, in his preface to the book, O’Riordan concurs with Eckersley that the mid-1970s saw a distinctive resurgence of what he calls a “utopian” orientation in ecophilosophy, citing theorists like E F Schumacher, Paul Erlich, William Leiss and Robert Heilbroner. Like Eckersley, he sees this ‘emancipatory’ or ‘utopian’ turn in environmental discourse as being primarily about assimilating questions of human well-being and the kinds of societies that might best support it, that is, contributing to an “ever-recurring debate about what kind of existence man [sic] should be seeking...” (O’Riordan, 1976, piv).

everyday lives. In short, emancipatory ecocentrism is founded on drawing out the liberatory potential of the ecological critique of industrialism (Eckersley, 1992, p18), and demonstrating that the desire for ecological integrity has positive consequences for the ways in which we think about human self-realisation.

The emancipatory strand of radical ecocentrism is well represented in the work of Murray Bookchin who, as early as 1965, argued that ecologism's radical critique of industrial capitalist social organisation offered to expand the realm of human *and* non-human freedom and self-actualisation (Bookchin, 1971, p58; see also Bookchin 1989, 1982, and 1986, for example). Theodore Roszak's *Person/Planet* (first published in 1977) advances the argument that a politics of personal growth and autonomy can only exist in a "vital reciprocity" with the "well-being of the global environment"; both are contingent upon a 'creative dissolution' of technocratic industrialism (Roszak, 1979, p318 and pxxx). Rudolf Bahro's ecocommunist approach (Bahro 1986; 1984) sees the psychological alienation of the individual subject and the material exploitation of nonhuman nature as the insupportable cost of expansionary materialism. Other leading voices in the first phase of emancipatory ecocentrism include George Sessions and Bill Devall, William Leiss, John Rodman, and Christopher Stone (Eckersley, 1992). Wolfgang Sachs and Vandana Shiva could be seen as more recent exponents of this approach, expanding the liberatory agenda of green philosophy to include a focus on global justice and a critique of developmentalism. In the emancipatory paradigm, the reconstruction of humanity's relationship with nature is not only "a step towards solving the material planetary problem", but is likely to make us "far better humans" (Eckersley, 1992, p19).

The orientation towards the future elaborated from within emancipatory narratives of the environmental crisis displays a dialectical synthesis of the two preceding modes of environmental discourse. The conviction of the survivalist paradigm that the ecological consequences of business as usual necessitate a radical shift in social structures and ideologies fuses with the participatory and

democratic ethos of environmentalism conceived of in distributional terms. This combined espousal of radical change and radically participatory democracy makes emancipatory ecocentrism's orientation to the future broadly utopian (we will return to this point in detail in Chapter 4). That is, emancipatory ecologism is explicitly concerned with the possibility of making a better world, not just a different one; and the mode in which it imagines such change is cultural, rather than statist, technocratic or managerialist. As the quote from Wolfgang Sachs at the top of this chapter suggests, emancipatory ecocentrism approaches the environmental crisis as the motivation for "a fresh inquiry into the meaning of the good life" (Sachs, 1999, p186).

Key to understanding emancipatory ecocentric discourse, then, is the idea that the environmental crisis can be read as the catalyst for positive change in the future that is about more than simply protecting and preserving our natural environments. For emancipatory ecologism, the environmental crisis presents itself, at least in part, as an "opportunity for metaphysical reconstruction and moral development" (Eckersley, 1992, p19). At the heart of this cultural and psychic reconstruction lies a new understanding of the possibilities generated by a holistic worldview that conceives of relationships as reciprocal. This reciprocity is held to apply to relationships between people *and* between 'person and planet' (to adapt the title of Theodore Roszak's influential 1979 text). In this philosophical framework, selves are seen as positively constituted by reciprocal relationships in what Roszak calls a "transactional sensibility" (Roszak, 1979, p58). This contrasts starkly with the modern European ideal of liberal individualism, in which selves are hemmed in by countless obligations to other people, as well as to external nature, and the assertion of the self *against* these constraints is key to the attainment of satisfaction or well-being. From an ecocentric position, on the other hand, human self-realisation is not simply connected with our relationships to other people and to nonhuman nature, it is inconceivable outside this context. Devall and Session use the concept of 'self-in-Self' to evoke the relationship whereby human identity and self-realisation are

predicated on the integrity and well-being of the wider environment (1985). If the spectre of environmental damage and depletion is what provokes deep ecology's critique of modern materialist industrialism, then the fundamental break with advanced industrialism envisaged in deep green theory provides the starting point for a consideration of human life and human welfare that stands to gain rather than lose from its new relationships with nonhuman nature.

Both 'deep' and 'social' ecophilosophical approaches, then, seek to reconcile human welfare with ecological integrity. They suggest that the environmental crisis necessitates a transformation of human values and consciousness. Thus political ecology's vision of sustainability demands a radical reconstruction of human culture. While policy programmes for sustainable development focus on institutional reform and structural modification, radical debates emphasise metaphysics, epistemology and subjectivity. Distinctions between its 'rational' and 'romantic' strands notwithstanding, ecological philosophy on the whole endorses an ideal model of social change (Pepper, 1991, O'Riordan, 1976, Dobson 1995). Above all else, ecocentrism is about the possibility of a new culture built on bioethical values, and a new form of relationship between society and its environment predicated on identification with nonhuman nature.

Deep green theorists argue that cultural and psychic change are the cornerstones of a 'truly' sustainable society. Emancipatory ecocentrism has been primarily concerned with questions about the values and ideals, the ways of living and relating, the sources of satisfaction and self-realisation, that might prevail if we could live by the essential insights of deep green philosophy. Emancipatory ecopolitical discourse imagines a social formation built on a holistic cosmology, empathy for all beings, human and nonhuman, and insistence that human subjects and societies (re)embed themselves in the natural world. Clearly, however, such changes in culture and consciousness cannot manifest themselves within the material structures and institutional networks of existing (Western) societies. In particular, radical ecology is rooted in a fundamental critique of global industrial

capitalism, both its ethos of progress and its material expansionism. Thus since its beginnings, political ecological discourse has debated the political economy and social structures that should replace this destructive industrialism and foster instead an ecocentric culture. The final section of this chapter explores the structures of a radically sustainable society proposed by emancipatory ecologism.

STRUCTURES FOR A SUSTAINABLE FUTURE

Since political ecologism's emergence as a distinctive discourse in the early 1970s, it has produced a proliferation of 'greenprints' for sustainability, detailing the economic, social and political structures that could support an ecocentric culture. The most overt consist in explicitly utopian sketches of a sustainable society built on ecocentric values - the prime example being *The Ecologist* journal's 'Blueprint for Survival' (Goldsmith et al, 1972) - but informal visions of an ecocentric society inform the majority of ecophilosophical arguments. Indeed, following Dobson's logic in *Green Political Thought* (1995), political ecologism as a whole necessarily has a distinctive picture of a better society: this is what makes it an ideology.

In this section, I draw on a number of sources in order to outline the arguments, blueprints and proposals that together constitute radical ecologism's discourse of a sustainable society. Dobson (1995), Hayward (1994), Eckersley (1992) and Pepper (1984 and to a lesser extent 1991) have all provided extensive overviews that draw out the foundations of green visions of the sustainable society with a focus on the principles of political ecology. From the perspective of utopian or future studies, discussions of the deep green ideal can be found in Kumar (1986) and Ross (1991, Chapters 4 and 5). Irvine and Ponton (1988) and Porritt (1984; 1996) offer comprehensive populist summaries of the main lines of polemic and debate. O'Riordan's *Environmentalism* remains a classic statement of ecocentric thinking and its sociopolitical implications. Further contributions to the debate come from de Geus (1999), Sachs (1999), Shiva (1993), Bookchin (eg 1989,

1982), Bahro (1986, 1984), Roscak (1973), Illich (1974), Pirages and Erlich (1974), Merchant (1982; 1992), Capra (1992), Cotgrove (1982), and Ekins (1986), to name but a few. As the preceding list will suggest, the literature in this field is considerable, and its sheer breadth and diversity precludes the possibility of an exhaustive survey. In order to pull out the commonalities and centres of debates, this section is organised in terms of three main themes, rather than by author or theoretical position. Firstly, I will look at how deep green theorists have addressed the socio-economic implications of the limits to growth thesis. Secondly, I will examine the debates over political economy and ideological position that have framed visions of the sustainable society. Finally, I will address the ideas about community and culture that deep green theorists have suggested are appropriate to a sustainable world. It begins, however, with a brief examination of the text that was foundational to deep green discourses of sustainability. *The Ecologist's* 'A Blueprint for Survival' both encapsulates and anticipates many of the central themes of the radical blueprints for sustainability that would follow it.

A blueprint for survival

One of the earliest and most influential interventions into green debates about the sustainable society, 'A Blueprint for Survival' was published by *The Ecologist* journal under the editorship of Edward Goldsmith in 1972. *The Ecologist's* vision of a sustainable future was born directly out of the early concerns of the limits to growth thesis. The 'Blueprint' was contemporaneous with *The Limits to Growth*; published shortly afterwards, it drew on the MIT systems model commissioned by the Club of Rome as the baseline for its environmental projections and solutions. It is a particularly powerful expression of the ways in which the insights of deep ecophilosophy can be translated into a schematic description of the social, economic and political structures of sufficiency, but by no means the only one. A number of emerging journals and groups embraced and pursued the post-limits message in the early 1970s: in the US the *Whole Earth*

Catalog, Mother Earth News and the *Co-evolution Quarterly* produced similar visions of a truly post-industrial society, as did *Undercurrents* and Friends of the Earth in the UK (Kumar, 1986, p406). The 'Blueprint' is simply the best known.

Built on a critique of the economic infrastructure, technocentrism, expansionist ideology and wasteful and alienating of life of industrial capitalism, 'A Blueprint for Survival' proposes a programme to avert ecological catastrophe and promote environmental security and human quality of life. It outlines the possibility of a 'sufficient' and 'stable' society through wide-scale institutional change, imagining social forms that minimise human-social disruption to ecological processes, an end to growth economics, the stabilisation of global population, and a radical decrease in technological dependence. *The Ecologist's* manifesto describes a return to grass-roots self-reliance and a scaling down of social systems of production and consumption. It advocates a new "urban-rural mix" and the founding of small scale, face-to-face communities, identifying human welfare with more permanent, rooted and intense forms of social relationship and a flourishing of human culture.

In retrospect, many aspects of the *Blueprint for Survival* seem anachronistic. Like *The Limits to Growth* itself, the explicit radicalism of its programme is often undercut by the implicit suggestion that the changes it prescribes might be effected within the existing structures of modern capitalist institutions.¹⁴ Economically, its assertion that it might be possible to change from an "expansionist society to a stable society without loss of jobs or an increase in real expenditure" (Goldsmith et al, 1972, p8) speaks volumes about its failure to identify or address the material power structures of industrial capitalism. Socially, many aspects of *The Ecologist's* vision of a secure, ecologically sustainable society feel staid and reactionary, compared to the currents of new

¹⁴This is indicative of radical ecologism's wider problem in addressing the issue of political agency (see for example Dobson 1995), a question that lies beyond the scope of this thesis. I will return to it again, however, in Chapter 4 in relation to the uses and abuses of the idea of 'utopia' in ecopolitical philosophy.

social movement and new left libertarian politics that have been embraced by later ecocentric thinkers. It is built on the unarticulated assumption that the nuclear family must function as the undisputed centre of social life. This in turn connects with the more overt and unreflexive desire for a return to mechanical forms of social solidarity - with their full implications of coercive social control. Rhetorically, a manipulative paternalism suggestive of the Brundtland Report pervades the *Ecologist's* arguments, most marked in relation to its discussion of population control¹⁵ where “subtle cultural *controls*” are advocated in order to “*inculcate* a socially more responsible attitude to child-rearing” (*The Ecologist*, 1972, p14; my italics).

Perhaps the greatest contradiction that the *Blueprint* displays is the stark contrast between the new forms of society it advocates and the projected transition from industrialism to sustainability. Its model of a sustainable future is open, radically democratic and bottom-up, evoking the possibility of a revolution in values and the meaning of human well-being and satisfaction. Its model of change however, owes its greatest debt to the economic realism of discourses of ‘efficiency’; its assumptions are technocentric and its aspirations managerialist. As Hajer has noted, its “romanticist critique of modern society” and arguments for “an anti-

¹⁵A recurring *bête noir* of environmentalist debate in this period. In the ‘survivalist’ period, Garrett Hardin’s ‘lifeboat ethic’ was notorious for its suggestion that if the ‘lifeboat’ could not support everyone, then some (widely read as Third World populations) would have to be jettisoned. The question of population control remains central to radical arguments about the sustainable society, which for the most part focus on the possibilities of negotiation and education rather than coercion or imposition, and more specifically on the “happy correlation” between women’s liberation and population reduction (Dobson, 1995, p93; see also Eckersley, 1992, p131; Irvine and Ponton, 1988). However, the spectre of disturbing responses to the ‘population question’ continues to hang over ecologism. Ecocentric theorists insist that it is not enough “simply to wait for... the lower birth rates that usually follow improved living standards... to achieve a stable and well fed human population”, because “the price of such a transition is further widespread ecological degradation and species extinction.” (Eckersley, 1992, pp130-131). The lowering of absolute population numbers, not simply a decline in the birth *rate*, is therefore central to ecocentric politics, and constitutes a long-standing source of tension between this approach and that of green socialists or social democrats. The emancipatory discourse of ecocentrism, however, does not advocate draconian solutions. See PR and AH Erlich (1990) *The Population Explosion* (NY; Simon and Schuster); Garrett Hardin (1968) ‘The Tragedy of the Commons, 162, pp1243-8; and Robert Young (1980) ‘Population policies, coercion and morality’ in (eds) D S Mannison et al *Environmental Philosophy* (Canberra; Australian National University) for discussion of these debates.

technocratic, decentralized utopia” sit somewhat awkwardly alongside its dependence on “cybernetics to illustrate the urgency of its call” and “comprehensive planning techniques to bring about the new utopia of self-sufficiency” (Hajer, 1995, p85). Thus *The Blueprint for Survival* is an important but profoundly ambiguous text in the building of a green discourse about the structures appropriate for sustainability. Like *The Limits to Growth*, the *Ecologist’s* articulation of a radical vision of sustainability is poised awkwardly on the cusp of two key strands of green political discourse; both texts are foundationally important to the emergent emancipatory discourse, neither is truly of it. Nonetheless, the *Ecologist’s* vision helped to clear a space for radical experiments in green futurism (Ross, 1991, p184; see also Hajer, 1995, pp78-89). The participatory and processual elements of its discourse went on to inform deep green attempts to generate structural frameworks for sustainable ways of life, as we will see in the following sections.

A sustainable economy: the steady-state

The limits to growth redux

The limits to growth thesis is foundational to deep green visions of the sustainable society, particularly in relation to calls for dramatic economic transformation. Rhetorically, the debates over the limits to growth in the 1970s marked a new urgency in the perception of the environmental crisis, as we saw in Chapter 2. Its dramatic scenario of ‘overshoot and collapse’ set the ‘apocalyptic horizon’ for thinking about the future of environment and society. As time passed and the crisis failed to emerge (at least in the dramatic terms envisaged by the limits discourse), and creeping ecological degradation became commonplace, and offset by a degree of increasing material progress (at least in some parts of the post-industrial North), the metaphors of the limits debate lost much of their rhetorical power. However, the enduring message of the Club of Rome’s report remains fundamental to ecological discourse (Eckersley, 1992, and Dobson, 1995). This

message has little to do with the crash and burn politics of radical survivalism, or the public perception of environmentalism as the voice of doom. It centres, rather, on the simple assertion that current levels of economic development are unsustainable.

Thus the limits to growth argument remains vital to the politics and philosophy of radical environmentalism, but it does so conceptually, rather than as a scientific exercise in precise extrapolation. Since the initial publication of the Club of Rome's report in 1971, numerous attacks have been made on the validity of both its assumptions and its conclusions.¹⁶ The choice of key aggregates was criticised (for the absence of prices and technology in particular), as well as the decision to assume exponential growth not just in the system overall, but in terms of the use of each aggregated input. This, it was argued, practically guaranteed the Report's pessimistic thesis: its status as a 'scientific' prediction appears to be undermined by deep methodological flaws insofar as its assumptions presupposed its outcomes. As O'Riordan puts it, the premise of exponential growth meant that the system was "programmed to catastrophe by Malthusian reasoning" (1976, p60). Some of these problems appear to have been confirmed by history, as critics have argued retrospectively that the Club of Rome's predictions were substantially inaccurate, pointing to the continued availability of raw materials, for example (Simon and Kahn, 1984; Dobson, 1995). Those of a Promethean bent assert that the Report failed to give adequate weight to humanity's essential resourcefulness in response to the ecological predicament. From a rather different perspective, *The Limits to Growth* is susceptible to attacks for its

¹⁶These would include, for example, H S D Cole, C Freeman, M Jahoda and K L R Pavitt (1973) *Thinking about the Future: A Critique of the Limits to Growth* (London; Chatto and Windus); Herman Kahn, William Brown, and Leon Martel (1978; first published 1976) *The Next 200 Years* (London; Abacus); J Simon and H Kahn (1984) *The Resourceful Earth: A Response to Global 2000* (Oxford; Blackwell); N Myers and Julian Simon (1994) *Scarcity or Abundance* (New York; Norton); and Julian Simon (1981) *The Ultimate Resource* (Princeton; Princeton University Press). The Club of Rome addressed some of these critiques, and re-asserted much of its original message, in Meadows et al (1992) *Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future*. Contemporary evidence in support of the limits to growth thesis might be found in the Worldwatch Institute's annual *State of the World* reports, which continue to remind us that "all the indicators of environmental quality and resource availability point in the wrong direction, and that disaster is just around the corner" (Dryzek, 1996, p29).

quantitative and realist epistemology from positions hostile to technocentrism and managerialism, outlined in Chapter 2. But deep green theory has come to “accept the detail of [the] criticisms while continuing to subscribe to the general principle of the limits to growth thesis” (Dobson, 1995, p78; see also Irvine and Ponton, 1988, Chapter 3). The enduring message was that expanding growth within a finite system is in principle unsustainable. In ecophilosophical discourse, the limits thesis encapsulates the argument that industrialism undermines itself through its own logic.

Scarcity and sufficiency

Ecopolitical discourse identifies industrial economic growth as the key material cause of global environmental depletion and despoliation. Thus deep green discourses of sustainability are built on a fundamental critique of economic expansion and the ideologies of progress that propel it; environmental problems are read as warning signs of a

profound incompatibility between deeply rooted beliefs in continuous growth and the dawning recognition of the earth as a space ship, limited in its resources and vulnerable to thoughtless mishandling.

(Goldsmith et al, 1972, p5)

The starting point of the green vision of sustainability is the concept of scarcity and a search for social and economic institutions based on a philosophy of sufficiency and stability, rooted in the “biophysical realities of a finite planet, ruled and limited by entropy and ecology” (Irvine and Ponton, 1988, p26). Ecological limits demand a social politics of “intelligent self-limitation” (Sachs, 1999, p185 *inter alia*). The aspirations to ever-increasing growth and consumption that underwrite the cultures of advanced commodity capitalism in the North and the desires inculcated by globalising ideologies of development in the South are fundamentally unsustainable. The message of *The Limits to Growth* is that it is production itself, and not the distribution of its spoils, that constitutes

the biggest political challenge of late modernity¹⁷, and that the mode of production, as well as its goals, must be radically overhauled.

One of the most influential proposals for the founding of a sustainable society within deep green discourse has been the idea of the 'stable' or 'steady' state economic system. This idea was hinted at in the Club of Rome's report (Meadows et al, 1972) and has subsequently been developed, not least in the *Blueprint for Survival* (Goldsmith et al, 1972), and by the green economist Herman Daly (1992, 1977), amongst others.¹⁸ Arguments for a no-growth society build on the limits thesis to argue that productive expansion on an industrial scale has only been possible because human societies have borrowed from a limited stock of nonrenewable resources at a rate that cannot be repaid. Global environmental sustainability over the long run depends on the institution of economies geared towards conservation, ecological security, and social need. In the economic terminology often preferred by *The Ecologist* and its successors, the expansionist economy must be replaced by an economy of stock (Goldsmith et al, 1972, pp12-13). In particular, deep ecology has focused its critique on the use of growth in GNP as an indicator of economic success and human quality of life, pressing for the use of alternative indicators that would measure, instead, how well societies conserve their stocks of resources, limit environmental waste and destruction, and provide for social and environmental satisfactions (see O'Riordan, 1976, Dobson, 1995, and Anderson, 1991, for a comprehensive discussion of this issue).

Proposals for a steady-state economy have enormous implications for the organisation of a sustainable society. Production must be brutally scaled down, and the production of goods primarily for exchange rather than use severely

¹⁷This shift might also be characterised as one away from redistribution and towards *reproduction*. As Carolyn Merchant has it in *Radical Ecology* (1992), the "goals of production need to be subordinated to the reproduction of life through the fulfilment of human needs and the preservation of local ecologies and be informed by an ethic of partnership between humans and nonhuman nature." (pp13-14).

limited. An ecological politics has no place for centralised industrial mass production, which tends to encourage growth as an end in itself, deplete scarce resources, and generate widespread environmental risks which rapidly outrun our ability to reduce them. Rather, ecocentric programmes for sustainability advocate forms of 'convivial' production such as those proposed by Ivan Illich (1973), or the 'autonomous' production that Andre Gorz (1985) has written about, referring to a tradition of small-scale, craft-based production by individuals or small groups of producers, which limit environmental impact and restore control and meaning to workers.¹⁹ A preference for local self-reliance, particularly in relation to food, is common in green visions of sustainability, rooted in bio-regionalist ideas (we will explore this point further below). Self-reliance does not mean complete self-sufficiency; it refers to relative rather than absolute economic independence. However, prescriptions for ecocentric forms of economic organisation privilege the use of local resources to produce for need, and are generally antipathetic to exchange and trade on a large scale.

Greatly reduced production implies a radical decrease in consumption as a core component of green visions of future sustainability. Deep green blueprints for sustainability advocate an ethos of 'enough' rather than more. Hence the resonant idea of 'voluntary simplicity' in ecocentric debates on sustainability. The concept of 'sufficiency' is integral to ecologism's narrative of the future. However, the insistence on reduced consumption in the 'limits' paradigm of sustainability raises the question of just how much is 'enough'. Most ecopolitical plans for sustainability suggest that a stable state economy with a limited scope for production can provide more than adequately for everyone's 'needs', but not their 'wants'. The former suggests the basic necessities of life (food, shelter, and so on); the latter, in green discourse, usually connotes frivolous luxury and the

¹⁸O'Riordan offers a detailed discussion of the development of the steady-state debate - see O'Riordan, 1976, especially pp39-126.

¹⁹An ecopolitical endorsement of these modes of production is to be found in 'A Blueprint for Survival' (Goldsmith et al, 1972); a useful review of the intersection between more general and countercultural critiques of mass industrial society and specifically green critiques can be found in Krishan Kumar's *Utopia and Anti-Utopia in Modern Times* (Kumar, 1986, pp402-424).

unnecessary pleasures of a life based around commodities (see, for example, Devall and Session, 1985, pp133-136). That is, advocates of ecocentric versions of sustainability tend to assume that human needs are somehow fixed, universal and essential, an assumption that is deeply problematic from the point of view of those who argue that they are in fact dynamic and culturally constructed, contingent upon historically specific circumstances (see, for example, Leiss, 1988). Although particular blueprints and theories will usually make a firm distinction between their concept of 'needs' and 'wants', the underlying reasoning is rarely unpacked, and these problems have not been adequately resolved within green discourse (Dobson, 1995, pp90-92). Nonetheless, the emphasis on reduced consumption is an undeniable and central aspect of the deep green programme for sustainability. That the question of needs versus wants appears to be somewhat intractable in principle does not detract from the fact that green debates insist that it must be faced if societies are to be made truly sustainable.

The changes to the process of production, as well as its scale, mentioned above have radical implications in a number of social spheres, but perhaps the most notable (and most discussed within deep green literature) would be those of resource use and the role of technology in the production process. Clearly, the question of the depletion of the earth's finite resources is pivotal to the limits case, and our continuing dependence on non-renewable energy sources in particular has long been at the centre of ecological debates. Radical visions of sustainability usually advocate some combination of reduced energy consumption and a switch to 'soft' energy sources. The radical curtailment of energy use necessitates simpler lifestyles and production processes more dependent on human labour. Renewable energy sources are prioritised to take up the slack; solar, wind and wave energy are usually preferred.

Approaches to whether or not there is a role for technology in the sustainable society vary somewhat across ecocentric theories, but in general technology is treated with extreme caution. If in industrial capitalist and developing societies

the default assumption is that technology always promises to enhance quality of life and promote progress, then within political ecology the default assumption is that technology threatens the environment, aids and expands human exploitation of nonhuman nature, and undermines human autonomy. Analytically, ecocentrism identifies technology as the crucial mediating factor between human societies and their natural environments, both materially and ideologically. Promethean faith in technology is taken to be a direct outcome of an alienated and exploitative orientation to nature, and technology has underpinned the environmental destruction wrought by industrial forms of modern society. The accusation that the green movement is unambiguously anti-technological, however, is misguided (Dobson, 1995). Some theorists are optimistic that technology can be managed better to be less environmentally damaging; such arguments would focus on the prospects for so-called 'intermediate' or 'appropriate' technologies and/or a non-determinist theory of technology that stresses the ways in which social context frames its meaning, development and use. Green theorists will generally posit that some technologies are acceptable in the context of sustainability, provided that their environmental impact has been minimised. However, the question of where the line between acceptable and unacceptable can be drawn is an open debate within green political discourse. These debates notwithstanding, deep green proponents of sustainability generally envisage a world in which current levels of technological dependence are greatly reduced, largely replaced by a culture of 'doing without' and 'doing it yourself'.

Thus, the logic of the limits argument insists that we must 'live lightly on the earth', as the green cliché has it. Ecology's commitment to a 'steady state' economy and a dramatically curtailed sphere of production and consumption raises once again the question of human well-being, and it does so by uncoupling it once and for all from the idea that only increasing material 'progress' can meet our survival needs, and that commodity consumption constitutes the main source of pleasure and focus of desire in human societies. This scenario suggests a radical alteration in human standards of the good life. At the heart of radical

ecologism's visions of a better, greener world is an absolute confidence that ecological limits and economic stability need not mean human-social limitations. The ecological critique highlights the social, psychological and material costs associated with all forms of instrumental rationality (human-natural and human-social), and on that basis sets out to reconstruct the notion of human well-being as one that could gain rather than lose from the limits implied by radical concepts of sustainability. On this reading, societies that damage and deplete nonhuman nature are simultaneously unfulfilling, even damaging, to human subjects.²⁰ Emancipatory ecocentric philosophy makes holistic links between the domination and exploitation of nature and human subjects. Large-scale, industrial-technological societies are held to be alienating and dehumanizing, as antithetical to human self-realisation as they are to ecological integrity. In contrast, an ecological society will serve to "*expand* rather than narrow the realm of freedom or human self-directedness in first (ie nonhuman) and second (ie nonhuman) nature" (Eckersley, 1992, p19; italics in original).

It is certainly true that radical ecologism's programmes for a sustainable society might be said to lack appeal for the Western consumer. Its narrative of the sustainable future, based on the no-growth economy, suggests a degree of scarcity and frugality that sits ill with the dominant developmentalist ideologies of plenty and progress. The liberal economist Peter Saunders characterises the 'deep green alternative' as "bleak austerity necessarily enforced through political coercion", an alternative that "the world doesn't need and won't accept" (Saunders, 1995, p130). Many would share his view, on the political left perhaps even more than the right; the green socialist André Gorz, for example, argues fiercely that small communities are almost inevitably parochial, insular, and oppressive (1987).

²⁰Some of the many ecophilosophical theorists to have addressed this theme might include *The Ecologist's* 'Blueprint for Survival', Roszak's *Person/Planet* (1979) and *Where the Wasteland Ends* (1973) and Murray Bookchin *The Ecology of Freedom* (1982). More recent articulations of this worldview include Rudolf Bahro (1984), Porritt and Winner in *The Coming of the Greens* (1988), Irvine and Ponton's *A Green Manifesto* (1988), and Wolfgang Sachs' *Planet Dialectics*

The injunction to consume less has consequences for almost every aspect of daily life: fewer goods and services, less travel and personal mobility; less luxury, convenience and disposability in our domestic lives; more work, more hardship, more sacrifice. But to judge ecopolitical philosophy's visions of a better world from the perspective of our own and find them wanting is to misunderstand its project. It underestimates the extent to which our thought is colonised by ideologies of progress, and the extent to which a new ethics can only emerge from a new worldview. It is only when we deconstruct the instrumental and economistic frameworks that saturate our commonsense assumptions that we can find anew the conditions for the human good life that simultaneously preserve nonhuman nature.

Ecocentric political philosophy seeks to identify a new cultural and psychic framework in which the apparent losses and lacks generated by its ecocentric programme form the basis for, and are counter-balanced by, equally important gains. The losses are material; the gains are construed in broadly non-material terms. Deep ecological theorists draw on a vocabulary of human well-being based upon "being and becoming" rather than having (Roszak, 1979, p301), and agitate for lifestyles that are "simple in means, but rich in ends" (Sachs, 1999, pixx). Ecopolitical theory looks for the source of human satisfaction in the non-material realm - in the development of a holistic consciousness, in respect and empathy for the natural world, in close relationships and fulfilling work, in purposeful leisure and a rich and varied culture. From its beginnings, the emancipatory green discourse has suggested that limiting economic growth can paradoxically expand the realm of human self-development. Both the Ecologist's 'Blueprint for Survival' and *The Limits to Growth* quote the same passage from

(1999). Useful overviews can be found in Boris Frankel's *The Post-Industrial Utopians* (1987) and Kumar's (1986) *Utopia and Anti-Utopia in Modern Times*.

Mill's *The Principles of Political Economy* to argue that a stable state economy implies

no stable state of human improvement. There would be as much scope as ever for all kinds of mental culture, and moral and social progress; as much room for improving the Art of Living and much more likelihood of it being improved.

(Mill cited in *The Ecologist*, 1972, p20' Meadows et al, 1972, p175).

The notion of human well-being at the heart of green visions of sustainability is a qualitative rather than a quantitative one. The argument from political ecology is that a culture founded on material sufficiency (rather than material excess) makes possible a form of life that identifies pleasure, unalienated labour, spirituality, reciprocal relationships with other beings (human and nonhuman), self-determination in the context of an enriched form of community (political and social), and living 'in place' as the foundation stones of human well-being.

The political economy of sustainability

First principles: ecocentric ethics and sociopolitical institutions

There is no one unambiguous political-institutional 'solution' to the problem of sustainability. Green theorists face two fundamental questions about what ecocentric principles and the deep ecological worldview imply for sustainable social relations with nonhuman nature. The first concerns the extent to which sociopolitical systems can and should mirror ecological ones; the second asks whether some political-ideological frameworks are materially more appropriate to sustainability than others. Theorists of environmentalism have treated these issues in different ways. David Pepper, for example, suggests that bioentric ethics are principally a matter of how we can live "in harmony with nature", and this in turn means that social systems should observe "ecological laws. The way

that the rest of nature is organised should serve as a model for human society” (Pepper, 1991, p12). In this formulation, there is an unproblematic mapping between the ‘laws of nature’ and the organisation of society; similar sorts of positions have often been imputed to bioregionalist philosophy (see for example Barry, 1994²¹). As we have seen, however, the claim that nonhuman nature offers definitive prescriptions for socio-political organisation relies on some questionable assumptions. The idea that there can be any unproblematic statement of what or how nature is, separate from our historical and discursive construction of its meaning, is fundamentally untenable (Dobson, 1995). Since its inception, deep ecophilosophy has clearly stated that the sociocultural transformations it advocates are not “derived from deep ecology by induction or logic” but are rather “*suggested [and] inspired*” by it; its tenets for social life are unashamedly (and “forcefully”) “*normative*” (Naess, 1973; italics in original).

A more productive way of addressing the question of how an ecocentric philosophy might limit or enable certain socio-political forms does not rely on such extreme forms of naturalism. Most theorists agree that the fundamental characteristic of green arguments about future socio-political arrangements is that the question of ecological integrity, and how social arrangements can best guarantee it, is primary (Dobson, 1995; Eckersley, 1992; Dryzek, 1997, Pepper, 1991 and 1984). Without this principle, ecologism’s status as a distinctive political ideology becomes questionable; if an ecocentric ethics is relegated to a second order concern, then ecologism becomes compatible with, and amenable to assimilation into, any position on the conventional ideological spectrum (Eckersley, 1992, Dobson, 1995). The strongest statement of this philosophy,

²¹This seems a rather simplistic reading of bioregionalism, which advocates the development of a human culture that is carefully *adapted to* particular local ecologies, rather than ‘modelled on’ natural systems. Although the particularities of the relevant ecological terrain set the *parameters* for the kind of society that could inhabit it appropriately, productively, and non-destructively, they do not *determine* the content of the socio-cultural form.

unsurprisingly, comes from Robyn Eckersley, who argues that the ecocentric approach

regards the question of our proper place in the rest of nature as logically prior to the question of what are the most appropriate social and political arrangements for human communities...the determination of social and political questions must proceed from, or at least be consistent with, an adequate determination of this more fundamental question.

(Eckersley, 1992, p28).

This is echoed in David Pepper's summary of the "ideal green world and lifestyle", distilled from the work of a number of green theorists (Pepper, 1991; p7). Pepper maintains that the deep green vision of a future sustainable society is built on a set of "core values about nature" which set parameters for the development of a series of second order "social implications" (Pepper, 1991, p10). Both approaches suggest that 'nature' does not or cannot determine social forms (*pace* Pepper's ostensible point in the paragraph above), but both also imply that some political-institutional forms are more conducive to sustainability than others (see also Dobson, 1995, pp80-84; O'Riordan, 1976).

Centralisation or autarky?

Since the emergence of political ecological discourse in the early nineteen seventies, two poles have framed debates about the political-institutional contours of a sustainable future. On one hand, calls for centralist authoritarianism have been strongly associated with radical articulations of the environmental crisis, most forcefully in the 'survivalist' discourse discussed in Chapter 2. More recently, however, ecocentric discussions of the sustainable society have been dominated by a commitment to anti-hierarchical, left-liberal, anarchist ideals. As Hayward argues, green arguments for political decentralisation focus on the need

for people to “feel part of their community in order to participate meaningfully”:

to do so they must be able to meet face to face, confident that their participation might make some material difference; moreover, they must be able to comprehend what is actually going on in their community well enough to estimate how different policies might affect it; finally, they must be able to survey the community as a whole...if they are to judge the general good rather than pursue narrow sectional interests.

(Hayward, 1994, p188).

Thus the “classical ecocentric proposal” is the “self-reliant community modelled on anarchist lines” (O’Riordan, 1976, p307). An ecocentric culture and a sustainable way of life are most likely to be facilitated by the fullest possible public participation in decision making, ensuring that subjects are as free as possible to order their own lives within stable ecological and economic structures (Goldsmith et al, 1972, p14). The preference for decentralisation, participatory democracy, and self-determination is indicative of ecocentrism’s embrace of ideal-cultural over structural models of change, as well as the marked influence of eco-anarchist and bioregionalist ecophilosophy on the discourse overall in the post-1970 period. For some, most prominently Murray Bookchin, political decentralisation is not simply preferable but necessary to human survival, as centralisation militates against ecological balance and bio-diversity.

The authoritarian response now plays little part in deep green scenarios of sustainable futures. The question of centralisation, however, remains a pertinent one in ecological discourse, particularly as claims that environmental problems are irreducibly global in character as well as scale have become more and more forceful in constructions of the environmental crisis (Yearley, 1996). Luke Martell, for example, argues that a broadly anarchist system based on self-reliance and decentralisation might in fact be antithetical to the delivery of worldwide sustainability (Martell, 1994, p51). Since environmental problems exist at a series of varying scales, from the most local to the most global,

institutional designs for sustainability must recognise this multi-dimensionality in order to address the environmental problematic appropriately and successfully. In particular, Martell's approach emphasises the need for regulation at the level of trans-national institutions to address the global character of some of the most intransigent environmental problems that we currently face - for example, those associated with global climate change. In a similar vein, Eckersley argues that in the context of current political and ideological structures, there are "sound reasons for not ceding complete political power to small, local communities", since local sovereignty provides no systematic institutional recognition of "the many different layers of social and ecological community that cohere *beyond* the level of the local community". A "multilevelled" decision-making apparatus that can recognise and reconcile these 'different layers' (local, regional, national, supra-national) is thus more appropriate to a society modelled on emancipatory ecocentric goals than local self-determination (Eckersley, 1992, p182).

In the light of the global status of environmental problems, Martell suggests that ecologism's call for decentralised autarchy has little to do with intrinsically environmental arguments (ie environmental science), but rather reflects the socio-political preferences of advocates of ecocentric philosophy, or the persuasive influence of the cultural and discursive context of its production, in particular its immediate background in countercultural and new social movement politics. It seems sensible to suggest, however, that if a purely naturalistic approach is epistemologically suspect (and Martell himself is justifiably sceptical of it), then the instrumental rationality implicit in valuing environmental science above other social and political grounds for decision-making is equally problematic. It is doubtful whether scientific environmentalism constitutes any better foundation for social prescriptions than a naturalist ontology; indeed, one might suggest on the basis of the problems endemic to the Brundtland Report that it makes a considerably worse one. In this light, the idea that ecologism's recommendations for future forms of society are based on the ethical and ideological analyses of ecocentric theorists hardly seems a criticism at all.

Martell's arguments about 'appropriateness of scale' tend to resolve themselves into a centralising discourse, offering a definition of reality in which environmental problems are essentially global and that their solutions must be global as well - the more complex issue of 'appropriateness' has gone missing here. Political ecologism on the whole tends to argue that 'small is beautiful' constitutes the only appropriate response to the globalism that not only defines but causes environmental problems, aspiring to "save the whole by saving the parts" (Eckersley, 1992, p168). The fact that small-scale eco-autarky is only one of a number of possible political economic responses to sustainability does not make it intrinsically wrong any more than it makes it intrinsically right. Most importantly, Martell's argument overlooks basic, definitional principles of deep ecologism. It sidesteps the ecocentric tenet that the only long term guarantees of ecological security are changes in consciousness, values, and ways of life, rather than structural and institutional change, and disregards the ways that bioethics involves a commitment to self-determination for all entities and systems, human and nonhuman. By and large, eco-anarchism's profound influence on ecocentric debates over the institutional design of sustainability has ensured that self-determination is held to be best achieved in social conditions that eschew hierarchy and resist any centralisation or concentration of power, and that privilege small-scale, autonomous, self-reliant and cooperative communities founded on free association. Most deep green theorists favour a system of direct participation in an open system of democratic decision-making; the politics of sustainability emphasise a grass-roots, bottom-up process over a top-down, administrative product.²²

²²Indeed, one of the chief criticisms of deep green politics is that it has been committed to an open process of exploration at the expense of a convincing theory of political change or a programme to secure the implementation of its proposals; this is, of course, an unavoidable consequence of ecologism's ideal model of social change. Similar accusations have been levelled at ecocentric pictures of the sustainable society: by insisting on an open, participatory democracy as the means of securing sustainability, it can offer no guarantee of outcomes, particularly ecological ones. See, for example, Dobson (1995), Hayward (1994), and Mills (1996) on these issues.

Thus, as Dobson suggests, there is “something about ecologism... that pushes it irrevocably towards the left of the political spectrum” (Dobson, 1995, p84). The “something” that pushes ecocentrism towards a left-anarchist framework is its own emancipatory philosophy. Sustainability born out of decentralisation and self-determination is a matter of ideology or idealism rather than the pragmatic political response that underpins arguments for centralisation. In theory, then, a radical commitment to the protection and preservation of nonhuman nature might be compatible with a range of political-ideological frameworks, including centralised and statist solutions of the right or of the left; in practice, emancipatory ecologism has offered a vision based on small-scale autarky. The social and cultural implications of green calls for decentralisation are explored below.

Living in place: the sustainable community

I have argued in this chapter that deep green theories are not predicated on the recommendation that social institutions should emulate ecosystems or natural ‘laws’. Ecophilosophical approaches do, however, encourage material and subjective proximity to nonhuman nature, and this basic tenet informs all aspects of deep green visions of the sustainable society.²³ Thus Dobson suggests that “an ecological principle for social life might be that the best social arrangements are those that involve an embeddedness in the ‘natural’ world” (Dobson, 1995, p112). The idea of ‘embeddedness’ usefully summarises the multivalent ideas about proximity that recur across green thought, and in particular draws attention to the complex interrelationships between nature and human societies.

For emancipatory ecophilosophy, distance is held to be at the root of exploitative attitudes towards nonhuman nature. Materially, distance from the environments on which we depend inculcates an instrumental, materialist and exploitative attitude which is only heightened as the chains of production and consumption

²³The misreading of ‘proximity’ as ‘emulation’ is marked in Martell’s work, cited above.

grow ever wider. Physical and psychic intimacy, on the other hand, generates ecological responsibility. Thus the idea of embeddedness signifies the holistic and relational ethics of deep green theory – both the abstract/rational bioethic that situates the value of human beings on a continuum with the value of nonhuman entities and systems, and the experiential ethics (as in transpersonal ecology) that works through proximity, identification and empathy. David Cooper, for example, has argued that for nature to be known practically, holistically, and experientially demands a rootedness in particular ecosystems. The particularity of place is crucial to this dimension of ecophilosophical thought, which thereby rejects the monolithic, seamless idea of Environment produced by globalist, realist and rational-scientific discourses like the Brundtland Report and its successors. Instead, emancipatory ecocentric approaches begin by attributing meaning to the environment as a “lived field of significance” whose elements, including human subjects, only signify in relation to each other in a dynamic network that consists in the multiple relationships between each entity. This nuanced picture of heterogeneous environments emphasises a kind of “radical localness” which implies smallness of scale, diversity, multiplicity and decentralisation - all of which are key terms in the deep green imagination of sustainable societies (Cooper, 1992; see also Sachs, 1999).

Bioregionalism

Ideas about embeddedness, ecological particularity, and how human societies can learn to live successfully in place proliferate within the bio-regionalist tradition. Bioregionalism is primarily about understanding the ways in which human cultures can evolve to live in and with the land around us, to “reinhabit” particular local ecosystems as ‘plain member’ rather than exploiter of nonhuman nature, as in Aldo Leopold’s ‘land ethic’ (Leopold, 1949). In its maximal articulations, bioregionalism prescribes specific limits to the size of social settlements (see Sale 1985) based on ecological analysis of the characteristics of particular terrains and biotic communities, and sets high expectations for local self-sufficiency, and

these proposals have certainly influenced green visions of sustainability (see, for example, Goldsmith et al, 1972; Irvine and Ponton, 1988). Bioregionalist ideas also find their way into deep green prescriptions for sustainability in a less precise and more impressionistic fashion. Here, Dryzek's distinction between the rational and the romantic elements of ecologism helps to elucidate the distinct contributions that bioregionalist philosophy has made to deep green blueprints for sustainability. On the one hand, he suggests, bioregionalism has a romantic, or experiential, dimension, which is about the cultivation of a 'sense of place' (Dryzek 1997, p160) and identification with particular biotic communities. This sense of bioregionalism stresses culture and consciousness, spirituality and the re-invention of the human subject in more relational terms. On the other hand, bioregionalist theory has a structural concern with "how political and economic structures might be designed to better fit with ecosystem boundaries" (Dryzek, 1997, p180), offering concrete plans for how the particularities of the natural/material world can provide the foundation for a way of life. Thus while much of the bioregionalist literature is "poetic, inspirational and visionary", it nonetheless constitutes a practical framework within which to imagine an ecologically embedded society (Eckersley, 1992, pp168-169).

Embeddedness: the ecological community

The foundation stone of green visions of sustainability is the small, cooperative, highly integrated and highly immobile community, through which is organised work and welfare, production and consumption, kinship and culture. This picture is the logical outcome of a deep green philosophy that emphasises living in place, along with the green economic arguments for self-reliance and the curtailment and decentralisation of production, and the green political case for participatory democracy and autarkic self-determination discussed above. The sustainable community would be fully integrated into the local landscape and environment, dependent on its resources and striving to balance social need with the ecological integrity of the immediate surroundings. Green philosophy endorses 'living in place' at the expense of geographical mobility, reflecting the toll that travel takes

on the natural environment. It sees an expanded role for shared, communal work; this, along with the decreased role of production leaves more time for the development of a diverse and thriving artistic and cultural life, for relationships, and for self-development.

Aside from the issue of embeddedness, the deep green case for the decentralised, small-scale community is threefold. Materially and practically, it is claimed that the self-reliant community is the socio-economic form with the least environmental impact. These arguments have changed little since their articulation in the 'Blueprint for Survival', which asserts that the decentralised community both militates against economic expansion and brings the points of production and consumption closer: proximity and self-reliance generate ecological responsibility. Secondly, green arguments draw specifically on the eco-communal tradition to suggest that the small community above all other social forms offers social, cultural, and relational compensations for the supposed losses and deficits implied by the green economic programme and its restrictions on growth and consumption. As we have seen throughout this chapter, ecocentric discourses resist the reduction of human well-being to quantitative and materialist measures. Instead, they focus on how societies can maximise more nebulous satisfactions for their members, emphasising welfare, quality of life and relationships, opportunities for self-realisation, and a rich and diverse culture. Deep green theorists generally argue that the most likely source of these satisfaction is the "rich and variegated interchanges and responsibilities of community life" possible only when "communities are on a human scale" (Goldsmith, 1972, p15).

Eco-communal philosophy also provides the key to the third green justification of the small-scale, self-reliant community: it provides a necessary context for the generation and reproduction of what we might call the 'ecocentric self'. Deep greens tend to argue that better ways of relating to both other humans and to the nonhuman world are fostered in small groups with intense, face-to-face

interaction (Bahro, 1986; Goldsmith et al, 1972). These conditions encourage a new conception of the subject and produce a self that is understood holistically and relationally, constructed in its reciprocal relationships with both nonhuman nature and other subjects. In the green vision, human well-being is rooted in the self-realisation and development of this porous, reciprocal subject. On the one hand, the ecocentric community is envisaged as a culture of connection with nonhuman nature, a connection that is often expressed in spiritual terms. On the other, the small scale, decentralised community suggests the possibility of a depth and intimacy in social relationship that is arguably missing in modern forms of society and which, green theorists argue, more than compensates for the loss of scope and scale of social life. And so we come full circle, returning to the fundamental tenets of ecophilosophy outlined at the beginning of this chapter: that a sustainable society ultimately depends on an ecocentric worldview and an ecocentric subject - a subject that can only be cultivated in close proximity, physical and empathetic, between human societies and nonhuman nature.

CONCLUSION

This chapter has explored a very different story about the sustainable society than that found within the hegemonic policy discourse. *Our Common Future* marked the emergence of the first new paradigm for understanding the environmental crisis and mapping greener futures since the limits to growth thesis. Emancipatory ecocentrism goes back to the limits thesis to make an alternative narrative. I suggested in Chapter 2 that the Brundtland-inspired discourse of sustainable development tells a story about the orderly transition of societies from an era of growth that has been dirty, damaging, and self-defeating to a new era of growth that is clean, ecologically cautious, and self-perpetuating. Emancipatory ecologism, on the other hand, tells a story about the radical leap of societies from an era of growth that has decimated nonhuman nature and restricted the self-realisation of human subjects to an era of stability and zero growth which allows the planet to heal and people to re-discover their own well-being. In deep green

discourse the contested signifier 'sustainability' is turned inside out. The technocentrism and managerialism of policy discourse are traded in for a participatory grass-roots politics; its centralising and homogenising tendencies are resolved into a decentralist ethics of 'small is beautiful' and a particularist approach to nonhuman nature; technocentric optimism is disregarded in favour of a kind of organic realism; and a politics of (re)production is substituted for the politics of development and distribution.

Where the Brundtland discourse frames its concepts and its narratives around continuities with current social structures and values, deep ecology constructs the future as a site of radical discontinuity. *Our Common Future* envisages an environmentally modified industrial modernity; ecocentric philosophy seeks a thoroughly post-industrial approach to the contemporary environmental problematic.²⁴ Above all, its vision of sustainability can only be invoked within the framework of a new metaphysical and material relationship between the human social world and the world of nonhuman nature. Thus the radical green discourse opens up the concept of sustainable development, allowing the meanings suppressed by Brundtland's closure around the narrow, administrative concepts of 'development' and 'environmental security' to emerge. By uncovering the assumptions that policy discourses of sustainable development leaves unspoken, ecopolitical thought recasts sustainability as a discourse of questions rather than answers. The conceptual framework of the limits to growth, whatever its shortcomings as an accurate prediction for future resource availability, functions as a critical device through which the discourses of development and progress can be deconstructed. Once the idea of human well-being is decoupled from the ideologies of progress and development, the

²⁴ For a brief survey of the ways in which 'post-industrialism' has been invoked as key to ecocentric approaches, see for example Frankel (1987), Porritt and Winner, (1988), Kumar (1987), and Dobson (1995).

sustainability debate can be revealed as a debate about what it would mean to live better within ecological limits. Ecocentrism argues that we must find ways to satisfy human wants and needs that do not overstep the limits that ensure long-term ecological integrity: we must learn both to want less, and to want differently. It is in this respect, perhaps, that ecologism's narrative of sustainability differs most dramatically from the dominant policy paradigm. The Brundtland-derived discourse of sustainable development is premised, as we have seen, on the idea that the present needs and wants of the West can continue to be met, and its conditions for a 'civilized' life' extended to the non-Western world, albeit in ways that are both more environmentally efficient and more just. This is the focus on means over ends, on efficiency and instrumental rationality, that has been the object of critique from deep ecology. Ecocentric discourses of sustainability ask the question of what might constitute civilized life itself under universal conditions of scarcity. Instead of an 'answer' to the environmental crisis, sustainability becomes a question about what human beings need and want in order to live a good life within ecological limits. Political ecologism's narrative of sustainability means the re-thinking of human values and goals rather than the efficient achievement of the Western hegemonic ideal.

We have seen in Chapter 2 that the confrontation with ecological limits to growth need not produce a zero-sum game in which ecological security and human development are traded off against each other. Within the limits paradigm, however, the win-win scenario appears rather different from the smooth reconciliation of 'clean' growth, 'managed' resource use and 'protected' environments offered by *Our Common Future* and the policy discourses it generated. The emancipatory ecological discourse turns on its head the apparently negative implications of absolute limits to industrial growth in a very different way, by insisting that it is human desire, our vision of the good life, that must change. In this sense, ecophilosophy relies to some extent on a cultural 'leap of faith'. Deep green visions of sustainability hint at a world that is partly inconceivable from within our own, and it is the utopian imagination which offers

a glimpse of this fundamentally 'other' world. Radical ecology suggests that the environmental crisis prompts us to envisage how it might be to live not only differently but better, in a new relationship with nonhuman nature. At heart, then, its project is a utopian one, and it is to the question of green utopianism that we turn in Chapter 4.

CHAPTER 4

Utopia: Imagining sustainability

INTRODUCTION

In Chapters 2 and 3, I explored two very different ways in which the environmental crisis has catalysed the search for greener and more liveable futures. Both the hegemonic policy discourse of sustainable development and the oppositional political philosophy of deep ecology tell a future-oriented story about the transition to a sustainable society in which the need for ecological integrity is integrated into social systems that promote human quality of life and well-being. I have argued that the Brundtland-derived discourse of sustainability is deeply marked by closure and continuity with the present, and that the attempt to 'achieve' sustainability through instrumental, technocentric and growth-oriented means is an inadequate framework for re-thinking the relationship between nonhuman nature and human societies. By contrast, I have suggested that emancipatory ecophilosophy marks out the terrain of a new space for imagining sustainability, conceived in the terms of an open and liberatory discourse that founds its radical visions on a fundamental break with the present. In this chapter, I begin to outline the argument that the deep green attempt to envisage sustainability is a utopian project.

Green theorists have drawn extensively on the utopian mode in their attempts to imagine a new and better world in the context of ecological limits. Conversely, deep green constructions of the environmental crisis have fed into utopian ideas and practice. In particular, the conjunction between utopian fiction and ecopolitical philosophy has served to expand and animate the idea of sustainability even beyond its reconstruction within emancipatory ecocentric discourse. In the first part of this chapter I address the ways in which ecopolitical visions of the sustainable society have been caught up in the language

and imagery of utopia. In Chapter 3 we saw how green ideologues have constructed systematic blueprints of better and more desirable future societies; here we look at how green theorists have argued that utopia is necessary to green politics and social change. In the second part of the chapter I introduce visions of the sustainable society produced from within the genre of the literary-science fiction utopia. Some key points of contemporary utopian theory will be raised in order to introduce the green utopian fictions ('ecotopias') that will form the basis of my analysis in Chapters 5 and 6. In the context of debates around sustainability, a nuanced and sophisticated approach to utopianism opens up two productive analytic paths. Firstly, it enables a critique of the limited and reductionist ways in which utopia has been used in ecopolitical discourse; secondly, it makes possible a detailed scrutiny of ecotopian fiction in order to assess its novel and vital contribution to contemporary debates over the environmental crisis and attempts to imagine a future state of sustainability. Chapters 5 and 6 undertake a detailed reading of novels by Marge Piercy, Kim Stanley Robinson and Ursula K Le Guin, charting their complex relationship with ecopolitical philosophy and diverse ecocentric proposals for sustainability. This chapter sets out the theoretical foundations on which my readings are based.

ECOLOGISM AND UTOPIA

The uses and abuses of utopianism: deep green theory

I will return to the complex question of how utopia is to be defined in detail later in this chapter. However, it will be useful to clarify some basic terms here. On the minimal and flexible definition proposed by Levitas in *The Concept of Utopia* (1990), utopia refers to an expression of desire for a different and better way of living and being. This concept frees the utopia from its long-standing association with prescriptive blueprints for an ideal society, but maintains the focus on utopianism as an impulse that looks beyond contemporary social arrangements

towards a radically other state of being founded on the potential for enhancing and expanding the conditions for human well-being.

Can the Brundtland-derived conception of sustainability be considered utopian on this definition? On close examination the policy discourse of sustainable development is fundamentally colonised by its subscription to the continuation of 'business as usual'. Thus it should not be seen as a discourse concerned with a different way of being, but as one focused almost exclusively on articulating a better way of managing our current way of life. By contrast, the emancipatory ecocentric discourse of sustainability is clearly a utopian one. As we have seen, ecopolitical discourse is founded on its philosophical holism and biocentric ethics, both suggesting that human well-being and a better way of living is to be found in a new relationship between human societies and nonhuman nature. The idealism and cultural focus of ecopolitical philosophy as a whole also orients it towards utopian future visions rather than the pragmatic politics of institutional reform. Thus utopianism is built into deep green discourse itself, not added on in the form of particular utopian visions and blueprints. This is rendered self-conscious in some strands of ecopolitical philosophy, most markedly in social ecology. Bookchin commits himself explicitly to the utopian mode, positioning his theory in relation to a history of (largely but not exclusively anarchist) utopian thought, which reaches back to William Morris and Charles Fourier as well as Kropotkin and Bakunin (Bookchin, 1982; see also de Geus, 1999, Chapter 11, and Eckersley, 1992, p186). For Bookchin, the main functions of utopianism are to present the relationship between past/present and future in terms of a "radical rupture" (Bookchin, 1982, p14), which opens up the future to forms of desire for a different kind of society that work outside dominant (economistic) discourses of 'progress' of the left or the right (Bookchin, 1982, p325). Thus utopia orients us to better ways of living through the "function of *imagination* in giving us direction, hope, and a new sense of place in nature and society" (Bookchin, 1982, p234; italics in original).

The utopian dimension of ecopolitical philosophy is well recognised within reviews of green political philosophy (Dobson 1995; Eckersley, 1992).¹ In his recent history of ecological utopias, de Geus has drawn attention to a deep-rooted and often overlooked tradition of ecological 'sufficiency' in utopian thought, and contends that the utopian mode is vital to green discourse. Both Eckersley's and Dobson's reviews of the field of ecocentric/ecopolitical thought have foregrounded the role of utopianism in green politics and theory. All argue that utopianism makes an indispensable contribution to deep ecologism generally, and to "the search for an ecologically responsible society" in particular (de Geus, 1999, Acknowledgements).

Both Eckersley and Dobson emphasise utopia's visionary qualities, which constitute the bedrock of radical green thought and a unique source of inspiration for a wider green politics (Dobson, 1995, pp199-210; Eckersley, 1992, pp185-186). On this reading, utopianism is

the indispensable fundamentalist well of inspiration from which green activists, even the most reformist and respectable, need continually to draw. Green reformers need a radically alternative picture of post-industrial society, they need deep ecological visionaries, they need the phantom studies of the sustainable society..."

(Dobson, 1995, p199)

For Dobson, idealist utopianism stands in a relationship of "creative tension" with the more pragmatic, reformist orientation of environmentalism; Eckersley similarly sees the need for a dialectic between idealism and pragmatism in ecocentric politics (Eckersley, 1992, p186). For both, utopia is a future- and other-oriented idea of or desire for an ecological society, rather than a particular plan or blueprint, and both see utopianism as a vital motivating force for activists and catalyst for political action.

¹It is, however, equally often overlooked in works that concern themselves explicitly with green future visions - see for example Pepper (1991), O'Riordan (1976), Irvine and Ponton (1988).

For Dobson, however, utopianism seems also to have a darker side (Dobson, 1995, pp148-165). Drawing on the negative connotations of utopia (its association with 'nowhere' as well as the 'good place'), he applies the concept to the green movement's model of change and finds it wanting. Ecologism has tended to assume, he argues, that because environmental problems are globally generated and widespread in effect, everyone has a stake in tackling the environmental crisis and acting politically in the name of sustainability. The threat of global ecological catastrophe, the urgency of the limits paradigm's 'apocalyptic horizon', is erroneously supposed to be enough to generate action for green change. The result, Dobson suggests, has been a failure to translate ecocentric ideals into active political struggle. The general 'change in consciousness' sought by ecologism has failed to emerge, and the perceived strength of deep green ideology - that the environment is everyone's problem - has become its greatest weakness - it is nobody's in particular (Dobson, 1995, p23; pp148-164). Here, Dobson uses 'utopianism' to signify an idealist and unrealistic commitment to an ineffectual model of political change which fails to identify a political subject. Communism located its historical agent (and ultimately universal subject) in the working class; the new social movements forged a basis for struggle from identity. The commonality here is the identification of a group with a direct and self-evident interest (material and/or cultural) in radical sociopolitical change. By contrast, ecologism has assumed that its appeal is universal and its subject the whole human race - as Bahro has put it, the ecological critique makes the "species interest" the fundamental point of reference of post-industrial politics (Bahro, 1982, p65). In practice, however, ecologism has failed to identify a social group with an immediate and practical interest in green change.

Dobson's is an interesting discussion of the contradictory relationship between the utopian impulse of deep green discourse and its need to make a material and tangible political impact in overthrowing (or at least altering) the status quo. Its

use of the concept of utopia, however, is rather unclear and often contradictory. In particular, the assumptions made about utopia's *functions* in relation to deep green thought and politics - its capacity to challenge ideas, motivate actors and catalyse action - require further elaboration. It is clear from Dobson's analysis that the utopianism he distrusts and rejects in relation to political activism is part and parcel of the broader 'visionary' utopianism that he welcomes as vital to ecocentric discourse. Specifically, Dobson's conception of deep ecology is that it is rooted in the very idealism that prompts its investment in another way of being; hardly surprising, then, that a deep green theory of institutional, pragmatic politics is somewhat lacking, and its history has been somewhat chequered.

Eckersley's treatment of utopianism is somewhat more sophisticated. Drawing on Levitas's work, she explicitly treats utopia not as a matter of blueprints or particular institutional arrangements, but as a disruptive and liberating cultural force. Eckersley argues that the green movement needs utopianism's ability to unsettle and challenge the 'common sense' nature of our present socio-political arrangements and open up a new "heuristic of future possibilities". The utopia presents "new ways of seeing and new visions of an alternative ecological society" which can help to stimulate and educate a desire for a different way of life (Eckersley, 1992, p186). In Eckersley's construction, utopianism is about the process of learning to desire differently.² Her understanding of utopia links it directly to the change of consciousness and subjectivity at the heart of ecocentric ethics, hinting at a series of internal resonances between ecological philosophy and the utopian process. Both are predicated on the possibility of making a cultural leap towards a different way of being rooted in an alternative vision of the world, suggesting that new epistemologies, new kinds of understanding, have a potentially transformative effect, and locating the catalyst for sociopolitical change in the desiring subject. Eckersley's brief analysis (which nonetheless forms a crucial part of the conclusion to her survey of ecocentric thought and

²The conceptual vocabulary of Eckersley's arguments are strikingly similar to the conception of utopia found in E P Thompson's analysis of Morris' *News from Nowhere*, which is discussed below.

politics) opens up the need for a more systematic account of precisely how utopianism works to produce the 'effects' she identifies. As in Dobson's work, assumptions about the supposed 'function' of utopia demand critical attention, but Eckersley's argument also raises the question of where and in what form these inspirational utopian visions are to be found. Whilst she associates the green utopian imagination with ecoanarchism in particular, and mentions a "new genre of 'ecotopian' literature by ecoanarchist and ecofeminist writers" (Eckersley, 1992, p186), she does not specify any texts.

De Geus and utopias of sufficiency

A more systematic and comprehensive analysis of the interchange between green ethics and ideals and the utopian mode is to be found in de Geus's (1999) *Ecological Utopias*. De Geus sets out first of all to trace the history of ecological utopias, which he organises into four distinct periods: the classical utopias of sufficiency (Thomas More's *Utopia* and Thoreau's *Walden*, first published in 1516 and 1854 respectively); the anarchist ecological utopias of Peter Kropotkin (particularly *Mutual Aid*, 1902) and William Morris's *News from Nowhere* (first published in 1891); the slightly later sketches of green utopias found in Ebenezer Howard's *The Garden Cities of Tomorrow* (1898), Bernard Skinner's *Walden Two* (1945), and Aldous Huxley's *Island* (1962); and finally the 'modern' (that is, post-political ecology) utopias of Ernest Callenbach's novel *Ecotopia* (1975) and Murray Bookchin's social ecology. De Geus's small canon is a diverse one. As this list will suggest, the utopias he describes come in a variety of forms. More's eponymous *Utopia* is neither realistic fiction nor outright polemic, but some originary hybrid of the two. Of the other 'novels' on de Geus's list, only one is by a novelist proper (Huxley), and two are fairly straightforward translations of their authors' theories into 'fictional' form (Skinner's behaviourism and Callenbach's bio-regionalist politics). Similarly, of the utopian political tracts de Geus describes, only two (Bookchin and Kropotkin) conform to conventional political philosophy; Howard's work is on urban planning, and Thoreau's *Walden*

is a genre-crossing work of political analysis, poetic philosophy and memoir presented in the form of a journal.

By describing the ecological themes of each of these utopian works, however, de Geus emphasises commonalities of content, and puts together a composite picture of the ecological utopia, a historically variable but distinct vision of a different kind of society (de Geus, 1999, chapter 12 in particular). Although these diverse utopias throw up “inconsistencies” and “unexpected ideas” (de Geus, 1999, p219), de Geus suggests that a set of basic principles for sustainability emerge, the most fundamental being that the utopia makes a profound recognition of environmental issues and engenders a noninstrumental attitude towards nature. The common themes of these green utopias include a steady-state economy, self-sufficiency, decreases in population size and personal mobility, organic agriculture and sustainable resource use, and a simpler, slower and less consumption-oriented way of life (de Geus, 1999, pp207-219). These themes are particularly notable, de Geus argues, because utopia has historically made a great investment in (material) abundance. A twofold distinction between the good life based on abundance, and the good life based on sufficiency, furnishes de Geus’s account with its underlying logic. The typology is based on divergent approaches to resolving a basic tension between the desiring individual/community and the external world (natural and/or social), a contradiction that might also be approached as one between wants and the mechanism of their satisfaction. Utopias of abundance resolve the ‘scarcity gap’ with recourse to a ‘productive’ framework, imagining universal affluence (often predicated on technological progress) so that human wants are satiated. Utopias of sufficiency resolve the scarcity gap with recourse to a ‘limits’ framework, imagining universal restraint and the substitution of nonmaterial for material satisfactions; human wants are reduced or reconfigured (de Geus, 1999, pp21-22). This is a somewhat limited typology of the utopia (see for example discussions of this issue in Davis, 1987, and Levitas, 1990), an issue I will return to in the next section of this chapter and in chapter 5. It does, however, enable de Geus to distinguish ecological utopias

from other ideals of a better society on the basis of their content. Specifically, it is the decoupling of hope for a better future from hegemonic discourses of progress and expansion that identifies the truly green utopia, which advances a “radically different conception of happiness and the good life” (de Geus, 1999, p210).

De Geus’s first concern is to identify and describe existing textual expressions of the green utopia; his second is to establish the significance and function of the utopia for ecological philosophy, focusing particularly on its relevance to green political parties and its potential role in debates about the sustainable society. De Geus’s basic argument is that the utopian tradition is vital to green thought, and must be examined in detail for its “useful ideas, enlightening images, [and] challenging perspectives”. What it offers to ecophilosophy is, “in a word, ‘inspiration’” (de Geus, 1999, p56). As in Eckersley’s approach, the model of utopia as blueprint is rejected. Its inadequacy stems from three main characteristics. Firstly, the blueprint signifies closure, a static and final “end state” (de Geus, 1999, p227). For de Geus, the ideal society (and the ideals of sustainable societies in particular) must be conceived of in terms of openness and dynamism. Social change in the direction of the sufficient society is an ongoing project. Secondly, de Geus objects to readings that present any particular ecotopian blueprint as the single or universal solution to the challenge of sustainability. There is “no one single absolute and ideal ‘end state’...no perfect scheme or complete blueprint for an ecologically viable society” (de Geus, 1999, p227). Rather, de Geus suggests that the utopian tradition should be understood through the metaphor of the “kaleidoscope” (de Geus, 1999, p255). One of its most distinctive qualities is its diversity and multiplicity, its ability to explore a heterogeneous possibilities for sustainable ethics, structures, and lifestyles (de Geus, 1999, p269). Finally, then, the utopia must not be understood as a

prescription for implementing sustainability. Its function is not to provide a plan of action, but to inspire and catalyse the spread of green values.³

Thus for de Geus, the most productive way of understanding the green utopian tradition is as a “navigational compass”, a way of looking to the long term future and uncovering and examining “plausible directions” in which an ecologically viable society might develop (de Geus, 1999, p227). Utopianism seems here to signify a style of discourse or cultural mode in which questions are raised, ideological and common sense ideas are challenged, critiques are elaborated, and alternatives to current forms of social organisation envisaged and explored. In fact, de Geus’s work suggests that the utopia has three main functions: inspirational, critical, and creative or expressive. The “unorthodox” ideas it can present, its capacity to surprise and challenge, are expressed through imaginative (often visual) expressive tropes that demand the reader’s participation and an active engagement with the questions raised.

For green parties and the broader environmental movement, whose focus is generally on pragmatic politics, de Geus suggests that utopianism’s main role is in the generation of “alternative ideas” (questions, objectives, principles and goals) for remaking society sustainably, ideas which must be “critical, imaginative and unconventional” (de Geus, 1999, pp265-266). He suggests that the environmental movement has an ambivalent relationship with utopianism; deeply committed to the ideals that utopias portray and the project of imagining new forms of ecological-social organisation, but suspicious and even fearful of the depth of the challenge they present (de Geus, 1999, p263). The implication here is that mainstream green parties, perhaps in order to get their message across to the wider public, ‘play safe’ in their unwillingness to go beyond the policy

³It is also notable that, unlike Dobson and Eckersley, de Geus makes no claims for the capacity of utopias to motivate actors or catalyse action; the contribution of utopias to green politics is thus analysed in terms of their *content* (the desirability or otherwise of the future visions they articulate) as opposed to their *function* in a model of green political change.

hegemony.⁴ De Geus argues that the green movement needs to move beyond these qualms to use utopias “systematically” (1999, p266) as a means of generating debate about the future that is desired, and to inspire and engage their constituency.

In particular, green utopias have the potential to expand the cultural and political scope of contemporary sustainable development debates, which he argues have been framed in terms of ‘soft’ questions about resource use, pollution and global development (de Geus, 1999, pp247-260). Questions about what sustainability means, and consideration of a range of sustainable societies that are both plausible and desirable, have been notably absent from the agenda.⁵ In view of the closure of sustainable development discourse around a single and administrative narrative, de Geus argues suggests that the “counter images” and “evocative” visions that utopias can furnish are urgently needed (de Geus, 1999, p264). Above all, he values the diversity of green lifestyles and institutions explored in utopian fiction, the multiple ways in which the society-nature relationship can be imagined. De Geus suggests that ecotopian heterogeneity is particularly crucial in relation to the deep green investment in the idea of ecological limits to growth. As we have seen, *Our Common Future* finesses away the implications of the systemic limits thesis (see Chapter 2). Keeping the idea of limits on the agenda, de Geus argues, depends on convincing people that limits don’t necessarily mean the “one-dimensional, bleak and austere” visions of the future commonly associated with radical ecologism, visions that owe a good deal to the post-limits ‘survivalist’ paradigm (de Geus, 1999, p269). De Geus argues that the social forms of sustainability are not straightforwardly determined; rather,

⁴This tendency has been read much more critically as the colonisation of once-radical ecophilosophical discourse by the policy mainstream, or the ‘institutionalisation’ of environmentalism (see Eder, 1996, and Jamison, 1996). See also Dobson (1995) and Hayward (1994) for an extensive discussion of this issue.

⁵De Geus’s discussion of sustainable development (see pp248-254 in particular) refers almost exclusively to the Dutch national debate, which he takes to typify its fate in Western European countries, and in Germany, Norway and Sweden in particular (p249). These are the countries identified by (for example) Hajer as the main proponents of ecological modernisation. As I have indicated in Chapter 2, sustainable development and ecological modernisation are stories generated within the same discursive paradigm (see Hajer, 1996).

as we saw in Chapter 3, the limits paradigm and the need for an ecological ethic function as a set of parameters which re-shape rather than prescribe and constrain cultural choices about how to live with(in) them. The utopian novels he discusses represent ethical human-social relationships with nature through a range of metaphors, including the highly individualised asceticism of Thoreau (expressed through the trope of the “cloister”), the idea of wilderness and desire for unspoiled grandeur articulated by Thoreau (again) and Huxley, and the highly socialised and aestheticized nature-as-garden metaphor of Howard, Morris, and Kropotkin. All of these metaphors explore the various ways in which human societies can live with ecological limits.⁶ They explore ways of negotiating ‘nature’ that range from modes of personal morality and relative austerity to highly collectivised forms of social decision-making and relative comfort (de Geus, 1999, p271). De Geus notes the similarly plural ecotopian response to questions of appropriate technology and a green political economy (de Geus, 1999, pp272-275).

De Geus’s study is a detailed and wide-ranging discussion of ecotopias which makes a sustained attempt to account for their appeal and outline their contribution to current sustainability debates. Its analytical approach, rooted in theories of political economy, favours breadth over depth, drawing attention to myriad features of the utopian mode and suggesting a great number of ways in which it produces effects or functions that promise to promote the deep green worldview. This breadth is perhaps both the strength and weakness of his approach. On the positive side, de Geus’s account of what utopia is and does presents a committed argument for its possibilities; his multifaceted and apparently non-reductionist approach treats utopia as a plural and heterogeneous form of expression. However, de Geus’s account of the ecotopia seems unwilling or unable to address the relationship between his concept of utopia and the wider

⁶In his critical discussion of how ‘effective’ these metaphors are in advertising the idea of sustainability de Geus rejects all but the idea of ‘natural cycle (or ‘ecosystem’), which somewhat devalues the commitment to diversity in utopian expression he evinces elsewhere (de Geus, 1999, pp230-235).

discourse of ecocentric philosophy. It barely refers to the existence of deep green discourse, let alone its varied philosophical bases and political implications. *Ecological Utopias* gives the impression that there is no sustained engagement with the relationship between nature and society beyond the policy sustainable development mainstream and green political parties. The idea that a distinctive body of green philosophy exists is never attended to, except as it emerges in the texts de Geus has himself selected, and this self-defined utopian canon serves as the sole opposition to environmental reformism. As we have seen in Chapter 3, however, a compelling argument can be made that deep green theory as a whole stands as a challenge to modern institutional environmentalism. More specifically, emancipatory ecopolitical theory since the early seventies has offered a self-conscious alternative to hegemonic policy discourses of sustainability. In this context, and given de Geus's limited analysis, it is difficult to see exactly what the self-conscious utopia's distinctive contribution to sustainability debates might be.

There is also a certain ahistoricism implied by de Geus's representation of ecological philosophy. The 'green ideas' of Thomas More are taken to be commensurate with Bookchin's political ecologism, and an equivalence between Thoreau and Callenbach is implied, despite the fact that the latter is the self-conscious inheritor of the former's deeply felt influence on north American discourses of nature and wilderness (see Callenbach, 1978; Roszak, 1979; Oelshlaeger, 1991, Chs 9 and 10). The analysis tends to treat heterogeneous instances of ecotopia as versions of the same, enduring, 'utopia of sufficiency', notwithstanding the very different cultural and historical circumstances in which they were produced, and without considering in any depth the internal relationships between them. Such an ahistorical approach sets up a paradoxical problem: whilst de Geus is keen to suggest that the ecotopian tradition brings a much-needed diversity to sustainability debates, his account overlooks key historical and discursive differences between the texts discussed. In particular, I would suggest that those ecotopias produced after the emergence of an

identifiably political ecologism and in the context of social debates around the idea of limits in the early seventies differ significantly from those that came before. De Geus's suggestion that utopias "begin with a clean canvas" (1999, p30) is overstated; however innovative and imaginative, each of the ecotopias he describes is evidently a product of its particular historical, social and discursive circumstances. Each also stands in a distinctive relationship to the utopian tradition itself.

De Geus is also rather vague on the question of what utopia actually is, or rather doesn't settle on any definition or explanation of utopia that remains stable throughout the study. A number of implicit definitions and assumptions about what the utopia is and does are offered, and it is precisely because these assumptions remain buried that the discussion lacks rigour and remains ultimately ambiguous. In *The Concept of Utopia*, Levitas argues that most theories of utopia proceed implicitly or explicitly on a definition that frames the utopian mode with reference to one of three of its features: its content (the specific details of the envisioned society), its generic form (as a non-narrative literary work), or its supposed functions (its purpose or effects on the reader and the wider world) (Levitas, 1990, pp1-8). At various stages in *Ecological Utopias* de Geus contradictorily invokes all three to explain the distinctive and valuable features of the utopian mode. At various points he identifies the *single* most important aspect of the utopia as i) its status as a "rich source" of "unorthodox ideas" (p260 *inter alia*) for the reorganisation of society (ie a content-led definition, focused essentially on what is depicted or imagined); ii) its particular discursive characteristics, specifically its "pictorial" or expressively visual qualities (ie a formal definition, less concerned with what is depicted than with how it does so) (pp31-35 *inter alia*); and finally iii) its capacity to provoke the reader's active participation in the world evoked (ie a functional definition, wherein the utopia is identified by its supposed effects, in this case to demand engagement) (p39; p260). Only the assertions about content are well supported by analytical argument or detailed textual analysis, largely because de Geus focuses almost

exclusively on descriptive accounts of the texts themselves. The content-based definition is also severely compromised by de Geus's failure to relate his corpus to the wider discourses of radical ecology, outlined above.

The more general problem with de Geus's focus on content in *Ecological Utopias* is its inability to engage analytically or empirically with precisely how the utopia achieves the effects imputed to it. The overwhelming aim of the analysis is to establish an ecological tradition in utopian thinking, but in his search for commonalities of content de Geus systematically ignores differences of form. There is no analysis of how the ideas and ideals for a more sustainable society are presented. I have hinted at one dimension of this problem above, which is that de Geus fails to attend to the relationship between the utopian currents within ecophilosophical discourse, and the self-consciously utopian narratives he describes. The arguments presented by de Geus as typical of the vision of the good life in the ecotopian text are absolutely endemic to deep green discourse - at least, in terms of content. This problem is complicated by de Geus's decision not to make any analytical distinction between what we might call utopian political philosophy and utopian fiction. That is, although the concept of utopia as I have defined it in this chapter is deliberately open as to the form of its expression, there is no doubt that the utopianism expressed through abstract ratiocination of Murray Bookchin is of a different sort to that spun into the description of a working social world found in Huxley's *Island*, even if the content of the ideas is very similar. They work with particular discourses and rhetorical devices and make a very different kind of contribution to the wider sustainability debate. Both are indisputably utopian, but each operates with contrasting possibilities and limits, such that the 'sufficient society' evoked by a piece of imaginative fiction is different from that outlined in a series of theoretical proposals.

Analytically, then, de Geus's account of the relationship of the ecotopia to the discourse of sustainability suffers by failing to make any distinction between different forms of utopian expression. Empirically, this is reflected in his

approach to the utopian texts he treats, which has, ultimately, a reductive effect. By submitting each to a schematic description of the content of its envisaged society, its specificity goes missing. De Geus privileges content and the effect that is supposedly achieved over an examination of how the representation of the imagined society, the narrative and rhetorical strategies chosen to show rather than simply to tell it, works to produce it. It is the particular qualities of the narrative ecotopia that interest me here, and that will be examined in detail in the rest of the thesis.

SUSTAINABILITY AND THE FICTIONAL UTOPIA

All of the above is simply to say that green utopian *fiction* offers to make a distinctive contribution to debates about the sustainable society. As we have seen by discussing de Geus's work, its particularity is not primarily related to the content (the structure or lifestyle) of the ideal societies represented in ecotopian fiction, which works with rather than significantly departs from the general lines sketched in the blueprints for a sufficient society outlined in Chapter 3. Nor does the philosophical approach to the relationship between the integrity of nonhuman nature and the possibility for human well-being significantly differ in green utopian narratives from the mainstream of ecopolitical philosophy: a range of ecopolitical strands from conservationism to transpersonal ecology are well represented in both. Like its radical theoretical counterpart, the literary ecotopia holds open the space of the future to encompass the multiple possibilities for sustainability that are systematically closed down within sustainable development policy discourse. Unlike green political philosophy, however, the ecotopian novel does not try to persuade by an appeal to the cognitive, logical power of epistemological and ethical arguments or the abstract rhetoric of theory. It relies, rather, on the power of the specific devices of utopian fiction (as well as some generic strategies of naturalistic narrative) to invite identification with and empathy for the particularities and contingencies of an everyday life in an imagined green world. In the following section I introduce a small corpus of

ecotopian novels that took on the biophysical, social and political issues raised by the 'environmental crisis'; as they did so, they transmuted the political and philosophical insights and ethical programmes of political ecology into a different shape, or at least brought a novel perspective to bear on them.

Three ecotopian fictions

The ecotopian novels introduced below were all produced after 1971, the symbolic moment at which ecopolitical discourse embraced the emancipatory ecocentrism I discussed in Chapter 3. All three offer complex, self-consciously elaborated visions of sustainable future societies in which the 'good life' for human societies both respects ecological integrity and incorporates a radically revised conception of human self-realization.

1976 saw the publication of Marge Piercy's *Woman on the Edge of Time*. Though widely recognised as an important feminist utopia,⁷ its commitment to an emancipatory ecological philosophy makes it more properly ecofeminist. The ecocentric aspects of Piercy's novel are underplayed in the critical commentary on it, and are all too often reduced to an aspect of her feminism (Russ, 1995a, is good example). Piercy's utopian community, Mattapoissett, is small-scale and organised around a radically participatory democracy which includes representation for nonhuman beings. An economy centred around organic agriculture provides for a society which enjoys advanced technology, largely for information and communication, and a sophisticated culture, all of which supports a diverse range of lifestyles and human fulfilment. Piercy's utopia is ambiguous: the text interweaves the Mattapoissett narrative with the story of the novel's protagonist/visitor, Connie, a poor Latina woman whose opportunities for self-realization in New York circa 1975 seem limited if not non-existent. The

⁷See, for example, (eds) Barr and Smith (1983); Donawerth and Kolmarten (1994); Ferns (1988); Fitting (1994); Freibert (1983); Jones (1990); Khanna (1990; 1981); Moylan (1986); Russ (1995a); Ruppert (1986); Sargisson (1996); Wolmark (1994).

question of whether Mattapoissett exists in the future or in Connie's dream/vision of a better way of living and being is left open.

Ursula K Le Guin's *Always Coming Home* (1986) is a fictional cultural anthropology of the Kesh, a "people who might be going to have lived a long, long time from now in Northern California" (Le Guin, 1986, 'A First Note'). The Kesh way of life embodies and enacts an ecocentric cosmology; all human experience is infused with a sense of embeddedness in the natural world, which comes as naturally to the Kesh as breathing. The most formally innovative of the three novels, its central plot concerns Stone Telling, a young Kesh woman, and her encounter with her father and his non-Kesh tribe, the Condor. This narrative strand explores a conflict between the Kesh way of life and our own presented allegorically via the Condor, whose civilisation legitimates conceptual binaries and the hierarchical domination and exploitation of other people and the nonhuman world. However, Stone Telling's story is undercut and complemented by many other fragments of Kesh life, including the reflections of the author figure, 'Pandora', on the form of utopia itself and the discourses available for thinking different kinds of future.

Kim Stanley Robinson's *Pacific Edge*, published in 1990, is the third part of a trilogy of science fiction novels set in a near future Orange County, California. A complex, "sad" utopia (James, 1992), it nevertheless offers a utopian counter to the dystopian tendencies of the two earlier novels, *The Wild Shore* (1994; 1st published 1984), which constructs a bleak post-holocaust regression to a kind of primitive survivalism, and *The Gold Coast* (1995; 1st published 1989), which extrapolates from our own time a vision of a car-centred materialist hedonism. In *Pacific Edge* ecological politics and wholesale legal reform have enabled the establishment of relatively small-scale, self-reliant, federalised communities, where work is meaningful and where interpersonal relationships provide the context for an autonomous identity. Plans to develop the last piece of wilderness in the area, Rattlesnake Hill, lead to a re-examination of what constitutes the

public good. The fight for Rattlesnake Hill is led by Kevin Claiborne, the novel's protagonist, whose responses to his natural and social environment are central to the ecophilosophical ideals and sustainable practices discussed in *Pacific Edge*.

This corpus excludes perhaps the only widely known green utopia recognised as such: Ernest Callenbach's *Ecotopia* (1978), first published in 1975. Callenbach is well-known as an environmentalist, specifically as a bioregionalist ecotheorist, whose non-fiction works include *Living Poor with Style* (1971), *The Ecotopian Encyclopedia for the 80s* (1981) and, recently, *Ecology: A Pocket Guide* (1998). *Ecotopia* imagines the secession of the Pacific North West from the rest of the United States to form a self-contained and self-sufficient ecological state. Through the newspaper reports and private diaries of a visiting American journalist, Will Weston, *Ecotopia* describes the structures and everyday practices of this near-future sustainable society: the decentralised and stable-state economy established under the benign aegis of a democratic Survivalist party, its environmentalist principles of recycling and conservation, its ecological ethics and love of nature. As the novel progresses, the stiff, rational style of the newspaper columns is subordinated to Will's private reflections, which change from hostile scepticism to guarded admiration, culminating in his conversion to the Ecotopian way of life.

Although Callenbach was unable to find a publisher and originally published *Ecotopia* under his own imprint, Banyan Tree Books, it went on to sell over 300,000 copies and has been translated into 8 languages (Smith, 1986; Clute and Nicholls, 1993). It is almost certainly the best-known ecological fiction amongst green theorists, and is frequently cited as the kind of 'inspirational' utopianism needed by the green movement and lacking in policy debates over sufficiency/sustainability (Eckersley, 1992; Button, 1988, de Geus, 1999). *Ecotopia* has thus been a discernible (if limited) influence on deep green discourses of future sustainability, affirming the possibility and benefits of rendering visions of sufficiency through narrative rather than abstract polemic. It

is *Ecotopia*'s popularity and the weight of its influence that leads me to attempt to account for its exclusion from my analysis of the green utopia. My argument is not primarily with the content of Callenbach's vision, which sits comfortably with the central tenets of the post-limits society set out in the 'Blueprint for Survival' and other contemporary environmentalist manifestos. It is perhaps precisely because Callenbach's novel is indistinguishable from the schematic visions of ecopolitical theory that it tells us little about how narrative fiction might approach and elaborate the sustainability narrative in a distinctive way.

At the heart of *Ecotopia*'s weakness as a work of fiction is what Naomi Jacobs calls (in the title of her 1997 article) its 'failures of the imagination'; Ruppert (1986) makes a similar argument. Both argue that the "progressive" utopian programme Callenbach articulates is undermined by aspects of its literary expression. As Jacobs puts it:

Callenbach creates a plausible future world full of rich detail and surprising new ideas; but where his work moves from explanation to dramatization - from general discussions to specific portrayals of individuals in action - the unregenerate, dystopic presence of the author's own culture often persists.

(Jacobs, 1997, p319).

Jacobs's approach to the utopian mode more generally derives from the post-modern theorist Fredric Jameson's intimations of its impossibility, articulated in his essay 'Progress Versus Utopia: or, Can we Imagine the Future?' (1982). Following Jameson's reading, Jacobs notes that, paradoxically, there is a sense in which all any utopian expression can do is demonstrate utopia's impossibility, to

bring home, in local and determinate ways, and with a fullness of concrete detail, our constitutional inability to imagine Utopia itself...as

the result of the systemic, cultural and ideological closure of which we are all in one way or another prisoners.

(Jacobs, 1997, p318).

We will explore aspects of this thesis further later in the chapter. However, Jacobs contends that Callenbach's is a different kind of failure or inability which speaks not to the general impossibility of imagining what is truly different or other, but to the ways in which the ideologically inflected unconscious of an individual writer emerges through narrative to undo his or her conscious project. The contradictions between conscious and unconscious in narrative, Jacobs argues, is particularly marked in the "unusually explicit project" of the utopian mode (Jacobs, 1997, p324). Jacobs's essay explores this issue in relation to Callenbach's treatment of gender and sexuality in *Ecotopia*, and it is indeed notable that the supposedly egalitarian and non-hierarchical society that Callenbach sets out to create is counterposed at multiple points by patriarchal assumptions and gendered stereotypes in what is shown rather than what is stated. Individual women are absent in most of the novel's settings, and those women who do appear are one-dimensional stereotypes existing solely in relation to Weston's needs for sex and nurture. These points illustrate the ways in which

Callenbach seems to have had considerably less difficulty in *thinking* an alternative future than in imagining it, less difficulty in rationally formulating a transformation than in actually envisioning or imaginatively experiencing the implications of that transformation.⁸

(Jacobs, 1997, p319).

⁸It is interesting that Callenbach's 'prequel' novel, *Ecotopia Emerging* (written after *Ecotopia* but set before and during the emergence of the Pacific North West as an autonomous ecological state), offers both a more compelling narrative *and* a much less sexist portrait of women's relationship to both men and 'nature' (Callenbach, 1981). However, since thematically it deals with the technological and political conditions for the emergence of a sustainable society, rather than the depiction of such a society 'in operation', I have excluded it here.

And for these reasons it is difficult to treat *Ecotopia* primarily as a work of narrative; it appears, rather, as political theory lightly disguised as fiction.⁹ As one commentator dryly puts it: “[Callenbach’s] interest is clearly in the reform of society, not the writing of novels” (Smith, 1986, p115); Callenbach himself describes *Ecotopia* as “half-novel, half-tract” (cited in ed Smith, 1986, p114). Kumar notes that it is “a good practical manual of some of the current ideas, but in its pedestrian literary quality, hardly an inspiring vision.” (1986, p420). Its density of “technical details” and urge for “practical efficiency” obscures its exploration of ecocentric values (1986, p411).

In contrast to Callenbach’s text, the three ecotopias I have chosen to focus on are novels first and exercises in political philosophy second. They fit broadly into the genre of science fiction, but appear at a point when the genre’s exclusive and foundational focus on the extrapolation of ‘hard’ science and technology was being complemented, and in some ways challenged, by ideas and issues usually associated with the social sciences and allied with the concerns of new social movement politics, feminism and ecologism in particular.¹⁰ The ‘literary’ credentials of Le Guin, Piercy, and Robinson are not in doubt. Between them, they have won most of the prizes that literary science fiction has to offer. Le Guin alone has won five Hugos and five Nebulas, and her reputation extends far beyond the science fiction community. Her novels have been nominated for the American Book Award and the Pulitzer prize, she is the subject of numerous critical and academic studies, and is included in Harold Bloom’s *The Western Canon* (1986).¹¹ Piercy’s two (and a half) science fiction novels, the utopia

⁹ This is by no means unusual criticism of the utopia. B F Skinner’s *Walden Two* is often seen as a barely fictionalised propaganda piece for behaviourism. On the history and literary worth of utopia’s form, and relationship to the tract or polemic, see Kumar, 1987.

¹⁰ See for example Aldiss, 1986; Ross, 1991; Moylan, 1986; Clute and Nicholls, 1993; Kumar, 1986; and Russ, 1995. This shift is acknowledged in both the growth of critical and academic study of sf from the late 1960s onwards, and the retrospective tweaking of the genre-label ‘science fiction’ by one of its foundational critics, Darko Suvin, who favours the term ‘speculative fiction’ (see his *Metamorphoses of Science Fiction*, 1979). Suvin’s term also allows the utopia to sit more comfortably within the genre.

¹¹ A useful summary of Le Guin’s current standing in the worlds of sf and non-genre literature can be found at <http://www.ursulaklequin.com>.

Woman on the Edge of Time (1976) and the later, more ambivalent look at future possibilities *Body of Glass* (1992)¹², sit alongside her much more extensive works of poetry and realist narratives. Robinson has also won the Hugo and the Nebula, as well as great critical acclaim for his work (most notably the 'Mars' series).¹³

Green themes in science fiction

Literary quality, then, and a commitment to narrative over polemic, was one criterion for the selection of the three novels addressed in this thesis. The second was that the fictions selected depicted 'full-blown' utopias in operation, as it were and, moreover, that the utopian societies represented drew on recognisable political ecological principles. Science fiction has a history of absorbing and working with environmental themes, but has produced few straightforward ecological utopias. An early wave of ideas about ecology entered science fiction in the period after WWII, most often in the form of the invention of alien ecologies posing problems for human explorers, typified by Brian Aldiss' PEST series between 1958 and 1962, and latterly reinvented in Frank Herbert's 'Dune' series and Kim Stanley Robinson's 'Mars' trilogy. The theme of colonising and making habitable alien and often hostile ecologies ('terraforming') is an enduring one in science fiction (Clute and Nicholls, 1993), but by the mid-fifties, earth's own ecology, increasingly portrayed as precarious and fragile, had become a

¹²*Body of Glass* is known as *He, She and It* in the US, where it was first published in 1991. Piercy's other 'half' a science fiction novel is her second book, *Dance the Eagle to Sleep* (1969), a near-future fable rooted in the revolutionary counter-cultural politics of the late 1960s that somewhat defies classification, though it is claimed as sf by the feminist sf community and by Moylan in *Demand the Impossible* (1986).

¹³Robinson's position in the sf canon is less assured than that of Le Guin and even perhaps Piercy (who is not a 'genre' sf writer). Although lauded in some parts of the sf community for his lucid, thoughtful style and 'soft' or 'humanist' concerns (Robinson emerged around the time that cyberpunk briefly appeared to have revolutionised science fiction, and his early writing was often considered in explicit contrast to the hard-edged, noir style of cyberpunk - see Clute and Nicholls, 1993, p1016), his early work was not universally well-received. On the basis of the early novel *The Wild Shore* (1984) and some short stories, Brian Aldiss dismisses Robinson as indicative of the trend towards softer themes and subtler, more literary images in science fiction which he argues produces mundane, dull and unimaginative fiction (Aldiss, 1986, pp419-420); Clute also considers some of the early work less than successful (Clute and Nicholls, 1993, p1015).

major preoccupation. The imagination of large-scale ecological disaster (usually emanating from a non-human source) became a marked trope; early examples of the eco-catastrophe story include John Christopher's *The Death of Grass* (1956) and J G Ballard's mysterious and oblique contributions in the novels beginning with *The Drowned World* in 1962. By the early 1960s, this theme comes into sharp focus, a development that Stableford (1993a) links firmly to the growing awareness of environmental despoliation set out in Rachel Carson's *Silent Spring* (published in 1962).

Stableford argues that the awareness of Carson's thesis - that the industrial way of life is producing dangerous and unpredictable forms of pollution - was quickly absorbed into sf, becoming a familiar feature of near-future fiction. Examples of the catastrophe in science fiction abound, a development that by the late 1960s overlapped with and reinforced the limits and survivalist arguments emerging in environmental discourse (Stableford, 1993a and 1993b). The impact of social organisation on nonhuman nature is explored in, for example, Harry Harrison's *Make Room! Make Room!* (1966) and John Brunner's *Stand on Zanzibar* (1968); pollution and overpopulation are common themes in this period, resonating with the central arguments of survivalist environmentalism. The cross-over between environmental polemic and sf is notable in the late 1960s, when ecotheorists Garrett Hardin and Paul Erlich both wrote science fiction novels (*The Voyage of the Spaceship Beagle* in 1972, and *Ecocatastrophe* in 1969 respectively). Science fiction's increasing concern with potential environmental disaster was also made self-conscious and explicit in two anthologies published in the early 1970s: *The Wounded Planet* (1973), edited by Roger Elwood and Virginia Kidd, and *The Ruins of Earth* (1971), edited by Thomas Disch.¹⁴

However, since the publication of the widely-admired 'Mars' trilogy and later *Antarctica* (1997), Robinson's reputation is well-established.

¹⁴A more recent, and more wide-ranging, collection of sf themed around ecology and its pasts and futures is *Future Primitive: The New Ecotopias* edited by Kim Stanley Robinson (1994). Despite its title, the ecotopias Robinson brings together are rather more suggestive and allegorical than descriptive.

Thus science fiction is saturated with themes of ecological destruction and apocalypse, variously sensationalist and action-oriented (Erlich's *Ecocatastrophe*) and subtle and psychologically focused (Ballard's *Drowned*, *Burning*, and *Crystal Worlds*). The search for less apocalyptic and more positive depictions of the possibilities for relationships between nonhuman nature and human societies is a more complex one. As Ross notes, the utopian currents in science fiction had long been associated with its technophilia and constructed within the "streamlined" contours of aesthetic modernism (1991, p141), a tradition clearly antithetical to the futures indicated by ecocentric thought. More sympathetic was the long-standing presence in science fiction and fantasy writing of pastoral and 'Edenic' themes. In English science fiction particularly, the desire for a return to a pre-industrial paradise and organic harmony with the world is well-marked, often in fictions that are explicitly anti-technology and anti-urban (Pringle, 1993). Stableford (1993b) links this 'Edenic' trope to enduring elements of nature-mysticism and to the introduction of ideas related to Lovelock's Gaia hypothesis (1979) into science fiction in the 1970s, citing such works as Pier's Anthony's *Omnivore* (1968) and Frank Herbert's *The Green Brain* (1966), though this tradition had already been given a powerful boost in the pre- and post-war era by Tolkein's depiction of the green and pleasant Shire in *The Hobbit* (1937) and the 'Lord of the Rings' trilogy (1968) (see also Veldman, 1994). As Nicholls (1993) notes, the pastoral became firmly linked to the ecocatastrophe narrative in the 1960s and 1970s by way of the post-holocaust genre, in which the threat of nuclear explosion is represented as both a horror in itself and as a metaphor for other, more insidious forms of ecological and social destruction (Nicholls, 1993). The imagination of holocaust opens up a space for the exploration of the kind of society that might emerge in the wake of industrial and technological collapse, and the hope of a new, more peaceful world restored to a harmonious relationship with nonhuman nature was a common one in science fiction. Examples might include Sally Miller Gearhart's ecofeminist fable *The Wanderground* (1985; 1st published 1979); Richard Cowper's post-flood 'Corlay' trilogy (1976-1982); Paul

O Williams' 'Pelbar' series (beginning in 1981) set in a rural post-holocaust USA; and Michael Swanwick's *The Drift*.

The pastoral as it appears in science fiction visions of green worlds has a history that reaches back well beyond the twentieth century, and links it firmly to the utopian tradition. This is evident from the most cursory glance at both English and American utopias (Morris' *News from Nowhere* and Thoreau's *Walden* being the most obvious examples) and I will address some of the ways in which pastoral and Arcadian aesthetics condition the possibilities of thinking about sustainable futures (in ecotopian theory as in fiction) more closely in Chapter 5. Here, however, it is enough to note an oft-mentioned problem with Arcadian or pastoral tropes, and that is their aspiration to embody atemporal worlds, to speak outside history. In seeking to capture the verities of an eternal Nature, and enduring human-social relationships with it, the pastoral denies politics, change and history. In particular, the pastoral has become linked with a Romantic antipathy towards technology, technological rationality and progress itself, an antipathy that shades all too easily into "nostalgic conservatism" that paradoxically fixes the desired Eden firmly in an identifiably pre-industrial age (Kumar, 1997, p405; see also Kumar 1981). Indeed, this is more often than not the critique levelled at the blueprints for sustainability produced within ecopolitical discourse, as de Geus has noted (1999). The green utopian fictions published before the emergence of a properly political ecology tend to be deeply marked by this nostalgia for an organic community and concomitantly by a static conception of utopia itself. Notable examples include Charlotte Perkins Gilman's *Herland* (1992; 1st published 1916) and William Morris's *New From Nowhere* (1972; 1st published 1890). An interesting liminal example would be Aldous Huxley's *Island*, first published in 1962, which positions its green and peaceful utopian island Pala in relation to global industrial development. Huxley's novel is a significant contribution to green ecological utopias, and its exploration of new forms of

human self-realisation in a context of ecological sufficiency have much to offer.¹⁵ However, the essentially static nature of its utopian society and the relentlessly didactic tone of the narrative have led me to exclude it from my analysis.

I have chosen to focus on fictions that explicitly position themselves in relation to the specificities of the 'environmental crisis' that emerged discursively around 1970, narratives that seek to engage with history rather than transcend it.¹⁶ Thus in looking for green utopian fictions that paint pictures of a desirable sustainable society, I have chosen to focus on those that are identifiably engaged with the politics of sustainability in the post-limits period, and these novels appeared within science fiction from the mid-seventies onward. This period saw a "mini-boom" in the production of countercultural and new social movement utopian fictions (Russ, 1995, p133; see also Kumar, 1987 and Ross, 1991). In the face of the apocalyptic and catastrophic scenarios that haunted science fiction, and in opposition to the technocratic, administrative and one-dimensional programmes proposed by both survivalist environmentalism and instrumental futurological politics (Ross, 1991), these fictions revived 'the future of thinking about the future', challenged universalising and linear conceptions of history with tales of multiple possible realities characterised by equality and diversity (Ross, 1991, pp137-147). The revival of the utopian spirit in this period was not confined to fiction, as Kumar notes (1986, pp380-410). The middle of the twentieth century seemed to many commentators to signify the death, or at least the 'twilight' of utopia (see also Frye, 1967, and (ed) Manuel, 1973). Recent history had suggested that 'progress' had exhausted itself, that technological advance was as likely to end in war as in the good life, that socialism (the great carrier of utopian hope in the nineteenth and early twentieth centuries) had played itself out, and that the totalitarianism often supposed to be implicit in utopia as blueprint or

¹⁵*Island* has also had a tangible influence on some of the ecotopias discussed here. The parallels between Huxley's text and Piercy's *Woman on the Edge of Time* are numerous, especially in relation to the discussion of an 'ecological' education. *Island*, like *Ecotopia*, is narrated by a hard-bitten journalist called Will who eventually undergoes a utopian conversion.

policy plan constituted the greatest threat to human happiness.¹⁷ And yet the 1970s saw, as Kumar notes, “the wresting of a new utopia from this unpromising material”: inspired by anarchism¹⁸, feminism, and ecological principles, responding to the environmental crisis not by appealing to technocracy and authoritarianism, but through a liberatory, emancipatory politics. This is the context which informs the sustainable societies dramatised in *Woman on the Edge of Time*, *Always Coming Home*, and *Pacific Edge*.

The novels of Piercy, Robinson and Le Guin build on ecopolitical theory to produce a narrative meditation on human well-being within the limits identified by sustainability discourses. Through narrative, they imaginatively actualise the key insight of emancipatory ecocentrism philosophy, rethinking biophysical limits to growth within the positive framework of 'embeddedness' as opportunities for human being to live better within our natural environments. Along the way they envision the social, economic and political structures of a radical sustainability, the patterns of living and being that both secure ecological integrity and promote the good life for human beings. Ecotopian fictions bring something new to the sustainability debate, expanding the discursive terms of ecopolitical narratives of the sufficient society. The final section of this chapter examines some of the analytical strategies proposed within utopian theory in order to get to grips with how ecotopian fiction makes its distinctive contribution.

¹⁶One of the ways in which Robinson, Le Guin and Piercy make this political engagement is precisely by incorporating a reflexive dialogue with both the pastoral and with progress within their narratives, a device that I will explore in Chapter 5.

¹⁷Kumar labels the idea that it is the rigid, static ‘perfection’ of utopia itself that is to be feared the ‘anti-utopia’ to distinguish it from dystopia (the simple imagination of a worse way of living and being). Notorious literary examples of the anti-utopia include Orwell’s *Nineteen Eighty-Four* and Huxley’s *Brave New World*.

¹⁸Kumar notes the revival and reprinting of works by Proudhon, Bakunin and Kropotkin in this period.

THEORISING THE GREEN NARRATIVE UTOPIA

As I have tried to make clear throughout this chapter, in the post-limits period both ecotopian fiction and the blueprints for sustainability produced within green political thought have been concerned with questions of sufficiency - that is, with the imagination of a wholly different way of living in relation to nonhuman nature. In essence, ecopolitical fictions and ecopolitical theory approach sustainability through a similar set of concerns and assumptions, employing a shared perspective on what sustainability might be for and how it is to be secured. Each offers a fundamentally different perspective on their shared material and concerns, however. As I have suggested above, the mainstream of ecopolitical theorising has tended to overlook the formal and expressive dimensions of the fictional ecotopia. Even in its most sophisticated variants (de Geus, 1999; Eckersley, 1992) ecotopian fictions are treated in a rather reductive and functional way: they 'illustrate' ecophilosophical tenets or 'inspire' environmental actors and thinkers (see for example Button, 1988, and Pepper, 1991). The implication is that green utopian fiction is entirely determined by the prior claims of green theory, and that green utopian narratives are reducible to statements of ecological philosophy. In fact, the two discourses operate according to widely differing logics: ecotopian fictions are primarily concerned with telling a story and inhabiting a new imagined world, whilst green ideologues are concerned with making theoretical prescriptions. There is a sense in which green narrative utopias hold open a space for testing the abstract principles of ecological democracy against the flow and texture of everyday life within the imagined construction of a sustainable future. Even at its most narrowly polemical, utopian fiction asks 'what if..?' rather than states 'we should...'. If one was to strip back the novels to their bare essentials, to delineate the social, political, economic and cultural structures and practices that they advocate, one would indeed come up with a boiled down version of the key points of emancipatory ecocentrism. Conversely, however, if one was to expand the precepts of political ecophilosophy it would not result necessarily in anything like the particular

novels at issue here. The proximity in terms of content between ecopolitical theory and ecotopian fictions cannot be read as identity; the two discourses are related but autonomous forms, with their own histories, intertextual connections, and rhetorical modes.¹⁹

On this basis it becomes important to read ecotopian fiction in relation to the history and conditions of its genre, especially when, as is the case with Le Guin, Piercy, and Robinson, the novels themselves reflexively problematise and build on their own generic antecedents. Thus I begin this section by positioning *Pacific Edge*, *Always Coming Home*, and *Woman on the Edge of Time* in relation to other literary utopias, and considering some strategies for reading them as critical and reflexive texts, before moving on to outline the ways in which their narrative qualities make them particularly important to debates over sustainability.

Reading fictional utopias: some definitions and devices

As I have implied above, defining the concept of utopia, marking out a history and a field of study, has proven notoriously difficult. I return here to Levitas's formulation, in which utopia constitutes an expression of desire for a different way of life through the imagination of "alternative worlds intended to represent a better way of being for the human beings in them" (1990, p180). According to Levitas, form, function and content have been the primary axes by which theorists have attempted to pin down the essence of utopianism, but insofar as utopia can be understood as a social construct, it routinely eludes such attempts; none of these elements alone can adequately capture the historical, discursive and ideological heterogeneity of utopian desire. Its content is in principle limitlessly variable; the form of utopian expression can range across discourses and genres; and the functions imputed to it (including, for example, escapism, compensation,

¹⁹A useful lesson on this point is provided by E P Thompson in his discussion of the relationship between William Morris' *News From Nowhere* and a Marxist orthodoxy seeking to isolate its 'correct' elements to serve as the poetic or symbolic illustration of a prior set of ideas; any

sociopolitical critique, and a blueprint for action) differ widely between theorists, as well as historically and ideologically. Utopianism, then, is better treated as the heterogeneous and underdetermined product of a contradiction between a particular set of social conditions and the needs and wants that they generate but cannot fulfil (Levitas, 1990, pp182-183). In the ecotopian narrative, the sustainable future is built on a contradiction between a contemporary condition (global industrial capitalism) which ensures the domination and exploitation of the natural world, and the need or desire for an unpolluted planet, for a fulfilling life in balance with it, and for the end of the alienation of human subjects, that those conditions generate but cannot satisfy.

However, against this backdrop of utopian heterogeneity a number of identifiable patterns and traditions particular to the genre emerge, both in terms of the utopia itself and the critical/theoretical commentary on it. The discussion in this chapter attempts to hold Levitas's general statement that utopian desire is manifest across a wide range of discourses and practices in tension with the identification of a particular sub-classification of the utopian mode, that is, the criteria that define the utopian novel. Here, of course, utopian desire is expressed in the particular form of a story about a better way of living and being as it is experienced by a group of characters interacting with each other and their wider social and natural world, depicted in varying levels of detail. A good deal of critical work (within what Levitas calls the 'liberal humanist' tradition) treats such fictions as the only expressions of utopian desire (in contrast with a broadly Marxist tradition that focuses primarily on the function of utopian desire; see Levitas, 1990). Within this tradition, accounts of the history of utopia conventionally take as their starting points two foundational texts: Thomas More's *Utopia* of 1516, which gives the genre its name, and Plato's *Republic*, which constitutes its 'archetype' (see Kumar, 1987; also Levitas's review of studies of utopia, 1990, pp34). Where the *Republic* lays out the ideal state in the form of a highly abstract political tract

challenges to the 'master' text are to be quietly discarded. See Thompson, 1975 especially pp787-788.

(taken up in the disciplines of political philosophy and theory), *Utopia* activates it “in full operation” (Kumar, 1987, p25), and in the *description* of its ideal society provides the utopia with its conventional form. More’s *Utopia* was something of a form *sui generis*, a “new literary genre” that would become the template for its successors (Kumar, 1986, p24). Book Two of More’s work, the “utopia proper”, is a “piece of narrative and descriptive fiction” (p25) that corresponds neither to the standard poetic forms of the day, nor to the Greek-derived philosophical dialogue that was common to classical sociopolitical critique, although it is informed by both. *Utopia* is neither Romance nor satire, although it draws on both those forms, and clearly pre-dates the novel as we understand it today (Kumar, 1986, pp24-30). I use the terms ‘utopian fictions’ and ‘utopian novels’ to refer to this somewhat ambiguous form, as well as to the perhaps more recognisable fictional narratives of the utopian novels that came after it. It is the fact that these works seek to show utopia through the coherent fictional representation of an imagined world, rather than simply describe such a world’s properties, that is salient here.

Utopias systematic and heuristic

The utopian novel has long been associated with some rather problematic properties, which have been primarily discussed in terms of its tendency towards rigid and static systematising such that the perfection of the social world invented takes on a stultifying, almost totalitarian, presence, and the possibility of human freedom, agency and creativity is implicitly denied. The properties of this world are often conveyed by way of dry, lengthy descriptions of social and political institutions. Rooted in the dialogic form of More’s *Utopia*, and reproduced in many utopian novels since, the stereotypical narrative structure of the ‘visitor/guide’ has emerged. The utopian guide propels the outsider (the representative of the implied author’s world) around his perfect society, expounding at length on its manifest virtues; the visitor, initially apprehensive, is

finally persuaded of its goodness.²⁰ However, the theorist Miguel Abensour has made a useful historical distinction between utopias produced before roughly 1850, which he refers to as 'systematic' utopias, and later ones, which are 'heuristic'.²¹ The systematic mode produces a closed utopia, a 'model-building' blueprint of institutions and structures which, in Raymond Williams' words, "seems to leave little room for any recognizable life" (Williams, 1997, p203). The heuristic mode, on the other hand, foregrounds the creation of an open and constantly changing utopian society, visibly made and remade by active, creative subjects. The 'heuristic' utopia is less concerned with social and political structures than with embodying in an imaginative vision the substance of a new set of values and cultural forms.

Whether or not Abensour's chronology is correct, his typology has been enormously useful to utopian theorists concerned not with blueprints of an ideal commonwealth, but with what E P Thompson has called the 'education of desire'. Thompson's reconstruction of utopia as 'the education of desire', written in response to Morris' *News from Nowhere* but not exclusively relevant to it, uses Abensour's systematic/heuristic distinction as a springboard from which to recast the utopian project as one concerned not with concrete and implementable solutions, but one related to the imaginative exploration of alternative possibilities. Thompson is keenest to draw out from Abensour's work the notion of utopian desire as a site for the exploration of the intersection of social values, social subjects and meaning:

...the *education of desire* [works to] open a way to aspiration, to 'teach desire to desire, to desire better, to desire more, and above all to desire in a different way' (p330). Morris' Utopianism, when it succeeds,

²⁰See, for example, Edward Bellamy's *Looking Backward* (1967), H G Wells' *A Modern Utopia*, William Morris' *News from Nowhere*, and Charlotte Perkins Gilman's *Herland*, *inter alia*.

²¹See E P Thompson's exposition of Abensour's work, which remains unpublished in English, in Thompson 1977, esp pp789-793; following Thompson on Abensour and 'the education of desire', see Williams, 1997; Levitas, 1990, esp pp119-122; and Sargisson, 1996, pp49-50.

liberates desire to an uninterrupted interrogation of our values and also to its own self-interrogation.

(Thompson 1977 p791; italics in original. The quote is from M-H Abensour (1973) 'Les Formes de L'Utopie Socialiste-Communiste')

On this understanding, there is no question of utopia being about perfection or closure around a final set of social structures which indisputably 'solve' social problems. Rather, Abensour's approach to Morris' utopia, and Thompson's development of it, begins to open a way for the theorisation of utopianism as asymptotic - constantly in search of a goal - a better way of living - that is never achieved, merely superseded by the next. On this reading, utopianism-as-process is open and, importantly, reflexive, a quality hinted at in Thompson's point about the self-interrogation of desire above.

The critical utopia

Abensour's distinction between the systematic and heuristic modes of utopian fiction can be developed by turning to Tom Moylan's more recent theory of what he calls the 'critical' utopia (1986).²² Moylan argues that the utopian fiction produced in the wake of the utopian countercultural politics of the late sixties and seventies goes beyond conforming to Abensour's typology to enact it in the narrative itself. The critical utopia is typified in four novels which overlap significantly with the ecotopian fictions I have selected: Marge Piercy's *Woman on the Edge of Time*, Ursula K Le Guin's (1976) *The Dispossessed*, Joanna Russ' (1975) *The Female Man*, and Samuel R Delany's (1976) *Triton*. These novels displays certain formal qualities which allow them to destroy, or at least problematise, the static, blueprint, structural model of utopia (which he argues has been co-opted and commodified by capitalism) in order to recreate it as critique of existing capitalist, instrumental and hierarchical value systems. The formal

²²A similar conception of utopianism as critical, heuristic and "ambiguous" can be found in Ruppert's *Reader in a Strange Land: The Activity of Reading Literary Utopias* (1986). As the title

qualities of the critical utopia that Moylan highlights are as follows (1986 p10 and chs1-3 *passim*).

Firstly, the text displays an awareness of the classic utopian tradition, and self-consciously rejects the utopia as blueprint in order to preserve it as dream or vision. This is often manifested as an element of self-reflexivity in critical utopian texts which is abundantly evident in *Woman on the Edge of Time*, *Always Coming Home* and *Pacific Edge*. Moylan's explicit attention to this quality of the critical utopia expands and elaborates the implication found in Thompson's and Abensour's work (highlighted in the quote above) that the shift in content from a utopia as structure or blueprint to one concerned with the exploration of new values and different forms of subjectivity and culture is impossible without a corresponding modification of the *form* of the utopia, in particular its narrative voice. This point is especially pertinent with respect to the ecological utopia, since its immediate context lay in an almost complete association between utopianism and a set of cornucopian assumptions generated by an affluent society with a great faith in the spoils of technological progress.²³ Unpicking the idea of the post-scarcity utopia, identifying the alienation, repression and exploitation of both the human and natural world on which it is built, has often meant unpicking the utopian discourse itself.

Secondly, Moylan argues that the critical utopian text foregrounds the conflict between the utopian and the originating world, and hence offers a narrative focus on the articulation of the role of human agency in social transformation. In the classic utopia, the role occupied by the protagonist in realist fiction is often taken by the society itself; in the critical utopia, human subjects are reinstated as the source of the narrative, and questions of agency and change are foregrounded (Moylan, 1986). Finally, Moylan argues that in the critical utopia the utopian

will suggest, Ruppert's approach tends to impute to the process of reading many of those elements that Moylan assumes are intrinsic properties of the texts themselves.

²³See for example Kumar 1987 pp388-402 on the 'post-industrial' utopians. This question will be addressed in Chapter 5.

society itself is offered not as an end point of perfection and hence closure, but as open and imperfect - the critical utopia offers a recognizable and dynamic social alternative. Sargisson's feminist work on transgressive utopian thought (1996) complements and extends Moylan's analysis on this point. Sargisson argues that the 'traditional' or 'historical' understanding of what a utopia is is not only inadequate to an understanding of later, 'critical' utopianism, but in fact fails to do justice to observable characteristics of canonical utopias themselves, including More's originary *Utopia*. Sargisson contends that whilst finite, static, 'perfect' utopias have been produced (she cites Bacon's *New Atlantis* as an example), they are in fact far less common than utopias exhibiting elements of the utopia as 'heuristic' or corresponding to Thompson's notion of the 'education of desire'. Utopias, for Sargisson, have always been and continue to be "fluid and dynamic" (Sargisson 1996 p20) constructions, about the exploration of alternatives and problems and not the imposition of blueprint solutions (Sargisson 1996 esp pp19-27).

Aside from these formal qualities, the content of the utopias Moylan analyses bears the hallmark of a deep engagement with broadly new social movement politics, and he notes that the most significant influences come from feminism and ecologism. The theoretical work on utopianism I have broadly outlined above begins, I hope, to clarify some of the key features of both utopian writing generally and of the particular sub-genre of the contemporary utopian novel labelled "critical" by Moylan. The next section brings together work from science fiction theory (Suvin, 1979, 1976; de Lauretis, 1980, Delaney 1977) and utopian studies (Moylan, 1986; Ruppert, 1986; Sargisson, 1996, and Levitas, 1990) to address in more detail some of the claims made about the functions or effects of utopian writing.

Two theories of utopianism

Cognitive estrangement

It has been claimed that utopian texts practice a form of cognitive estrangement that allows a radical critique of current social systems and values. In common with science fiction and other genre fiction that plays with probable, possible and desirable worlds, utopias use the dialectical narrative relationship between present and future to critique dominant ideologies and offer alternative, oppositional values. Science fiction theorists like Darko Suvin, Teresa de Lauretis, and Samuel Delany, as well as Tom Moylan, have all written, albeit in different ways, about the capacity of such narratives to disembed us from the taken-for-granted, commonsense nature of our current ideological and cultural frameworks, and hence to enable us to develop a critical, oppositional stance towards them. Work in this area explores how, as E P Thompson has put it, during the utopian “adventure” our “habitual values (the ‘commonsense’ of bourgeois society) are thrown into disarray” (Thompson 1977 p790). On this reading, the science fiction or utopian text is a site of cultural resistance which, for Moylan at least, is predicated less on the particular content of the utopian or science fictional society, and more on the act of utopian imagination itself (Moylan 1986 p26); that is, utopia is understood primarily as process rather than product. In the case of the ecological utopia, such a reading would imply that the novel enacts a critical deconstruction of the ideologies of exploitation and domination of the natural world that is more powerful than straightforward ecocriticism because of its ability to shake us out of our implicatedness in those very ideologies.

Theorists have approached this effect of narrative from different angles. Samuel Delany has argued that cognitive estrangement is produced by the distinctive ‘reading protocol’ of science fiction, which prompts us to ask ontological questions about possible worlds (Delany 1977; 1980). Suvin argues that it is a product of the science fiction narrative's inclusion of a defining ‘novum’, or

novelty, from which flow all the text's dislocations of the real world (Suvin 1976;1979). De Lauretis sees this estrangement effect as a quality of the language of the science fiction narrative; its peculiar "literalization of language" sets up a possible reshaping of our discourse, conjuring the possibility of a different kind of world (De Lauretis 1980 p168). From all these angles, however, the outcome - dislocation, estrangement, critique - is fundamentally the same.

The functional debate about 'effect' has strong roots in Marxist theory and hence a commitment to exploring the relationship between utopia and political praxis. However, as the debate has developed it has become less interested in positing a direct relationship between utopia and change, and increasingly concerned with more complex problems of ideology and consciousness, filtered through contemporary cultural theory. There is a sense in which Moylan's work epitomises this trend, overlaying concepts from the more straightforwardly utopian theory of Bloch and Marcuse with insights from the work of Gramsci, Althusser and Foucault. Recent work on the function of utopia, then, has come to suggest that the textual figure of the better, usually future, society is a mode of active engagement with the ideology that saturates our consciousness of the world or indeed constructs it, or a site at which an ongoing dialectic between ideology and opposition is played out. The utopian figure, whilst paradoxically born out of ideology, is inherently critical of current material and ideology reality; the act of producing or reading the expression of another world that offers a position of dislocation from our current one (see Moylan 1986; Sargisson 1996 and Cranny-Francis 1990).

The 'cognitive estrangement' approach to utopia is undoubtedly valuable, and a necessary foundation from which to think about the act of reading speculative fiction. It provides a systematic corrective to the humanist tendency to read the utopia in solely literary terms, as well as challenging the assumption of political ideologues (political ecologists included) that the inspirational or mobilising effects of the utopia are self-evident. Content-based or purely formal concepts of

utopianism fail to provide any real framework from which to read the desired future society as inevitably sutured at multiple points into a relationship with our experience of a real present. Functional approaches, on the other hand, theorise a systematic relationship between the two worlds. Yet this main point of value of the functional approach is also the key to its problem. It is undeniable that the utopian genre has been used almost without exception as a self-consciously political critique of existing social structures, values and institutions. The problem arises when this uncontentious statement tips over into an assumption that this is *all* that the utopian figure is, or at least all that needs to be said about it. The danger here is a tendency to reduce the alternative or future society offered by the text to a simple critique of the present; that is, to let the engagement with the present/real world overwhelm the specificities of the envisioned future or alternative society. This is not an inherent problem of functional approaches; it is probably better seen as an empirical fact of analyses undertaken within this framework, and Moylan's (1986) work is particularly susceptible to this criticism. This is not to suggest that utopian fictions are *not* about contemporary society, but to argue that they are not solely about it, or perhaps that they are 'about' the present or the real in particular and distinctive ways. Those analyses caught up with the ways in which the utopian figure critically deconstructs contemporary society often fail to take fully into account the specificity of the strategy of the critique - not an abstract polemic, but a full-blown journey through an imagined world which has its own narrative mode of existence. In summary, these approaches fail, firstly, to take the envisaged future seriously on its own terms, and secondly, focus on the fact of the utopia's oppositional engagement with contemporary ideology to the exclusion of any attention to the manner or mode of such engagement. Functional, 'cognitive estrangement' approaches to the utopia go a long way toward answering the question 'in what ways does this figure of a future society implicitly criticise the one in which I live?', but often leave an equally important question entirely unanswered - the question 'why use this particular discursive strategy as a means for that critique?'

Cognitive estrangement approaches to utopia, then, prove to be something of a mixed blessing in the attempt to uncover or elaborate the contribution that the literary ecotopia can make to green discourses on the sustainable society. Positively, they offer a plausible account of the effects of utopianism which supports green theory's insistence on the need for explicitly utopian visions as central to ecology's critique of industrial-technological ways of life. Both critical utopian theory and emancipatory ecocentrism suggest that a discursive or philosophical framework - a world-view - underpins the material reality of the existing system, and that making a difference involves seeing differently. However, I am less convinced of the ability of the functional approach to illuminate the importance of engagement with the details and texture of the utopian figure itself without reducing them to a set of strategies for criticising current ideologies. Sargisson has suggested that the operative difference between utopian writing and 'straight' philosophy or theory lies in the subversive effect of the former's playful, inventive nature. In utopia, "[s]erious (philosophical) is dressed up as trivial (fiction), which is undressed as serious (philosophy)" (Sargisson, 1996, p42). Functional approaches spend a lot of time 'undressing' the utopia to uncover its critical or deconstructive message, but perhaps not enough on what the process of 'dressing up' has to offer both the reader and the broader cultural debate. The next section considers one way in which we might find a sustained focus on the particular narrative qualities of the literary utopia, and on what taking the imagined future sustainable society seriously might mean for the reader of ecotopian fiction.

The experiential dimension

In order to get to grips with the contribution that the fictional ecotopia can make to social debates about sustainability and the hope for an ecologically sane future society it is imperative to focus on the imaginative and literary qualities of the green utopian novel. What sets *Woman on the Edge of Time*, *Pacific Edge* and *Always Coming Home* apart from the green blueprints discussed in Chapter 3 is

the mode of expression of their ideas, the ways in which narrative translates principles for sustainable living into the rounded imagination of a functioning world. Ruppert's work reminds us, echoing Frye (1967), that utopian narratives are, after all, first and foremost fictions, "combining formal structures, generic conventions, and narrative strategies in order to produce certain effects" (Ruppert, 1986, p15). These narrative strategies and generic conventions create a reading position that asks us to take the imagined utopian world seriously on its own terms. The dialectical relationship between 'no-place' and 'good-place' at work in the utopian text is not in question here;²⁴ even in the most developed of utopian fictions, the apparent realness of their world remains in tension with its fictive, imagined qualities. But whilst functional theories of utopian effect suggest the ways in which the utopian mode clears a space for the imagination of alternative, ecocentric ways of living, they tend to obscure the fact that the utopian narrative immediately fills this space in vivid detail with a utopian figure that, if it is successful, offers solutions to the social problems and contradictions it identifies. This is not to suggest a return to reading of utopia as blueprint; quite the contrary. It is rather the particularity and contingency of the solutions proposed in the ecotopian novel that make them so distinctive and, arguably, attractive. Work in both utopian and ecopolitical theory has pointed to the intractability in principle or in theory of some of the fundamental questions that utopian expressions must grapple with, questions relating to the conflicted nature of necessity and desire, fulfilment and responsibility, individual well-being and communal interrelationships, for example (Levitas, 1990, 1996; Ruppert, 1986; Max-Neef, 1992; Dobson, 1995). It is clear, however, that we 'solve' these problems on an *ad hoc* and, green theorists would argue, wholly unsatisfactory manner in our everyday lives. The ecotopian novel uses the conceptual space of utopia to explore alternative and better, yet still local, open and idiosyncratic, solutions.

²⁴This characterisation of the tension in utopian representation derives from More's coinage of 'utopia' itself, a pun deriving from both 'eutopia' ('good place') and 'outopia' ('no place'). As Levitas suggests (1990, pp1-3), the ambiguity of the concept of utopia is present in its very beginnings and has been rather a mixed blessing. While this ambiguity has been reclaimed by functional utopian theorists as a positive generic and textual effect in the fight against ideology, it

The joy of the utopian novel lies not in the plausibility of its imagined society, or the idea that it can be implemented, but rather in its thorough, detailed and close-up exploration of very particular possibilities.

In this sense, and perhaps paradoxically, it is less the specifically *utopian* dimensions of these novels than the qualities they share with imaginative fictions more generally, and the realistic novel in particular, that is at issue. This is particularly true of the critical utopia. Notwithstanding the reflexive representational techniques of these novels and their substantive commitment to thematising the values rather than the institutions of the better society, their novelty and success arises at least in part from their willingness to embed features of naturalistic conventions into their reflexive narratives. The critical ecotopia differs from its blueprint/static/systematic counterpart partly because it has plot, 'rounded' characters, and dialogue that is not limited to the didactic exposition of utopian world. As a result, they produce a reading position that calls for empathy and identification. This is why I draw attention to the *experiential* as well as the *cognitive* effects of reading the utopian narrative. The quality of imagination or inventiveness that characterises good utopian literature (Frye, 1967; Sargisson, 1986; de Geus, 1999) is inflected through narrative to produce a fully realised yet wholly imagined world that nonetheless maintains a real, if attenuated, relationship to the present one. This situation offers to the reader a qualitatively distinctive type of knowledge which I call 'experiential'. The systematic, blueprint utopia (fictional or theoretical) offers us cognitive knowledge of a better world to convince us, in a logical and abstract manner, of the normative dimensions of the sustainable society - that it ought to be like this. The heuristic, critical, reflexive utopia invites and teaches us to want a better world (as in Abensour/Thompson's conception of the 'education of desire) by offering up new values and a new culture elaborated into whole ways of life, to borrow Raymond Williams' phrase. It's the difference between a utopia constituted in the dead

has also underpinned the common-sense notion of desire for a different way of being as an essentially impossible and escapist dream.

weight of structures and institutions, leaving little room for “any recognisable life” (William, 1997, p203), and one which uses the conventional devices of fictional narrative to produce a utopia teeming with life, detail and texture.

This is to say that the ecotopian narrative is perhaps the closest we can get to actually experiencing what it might feel like to live in a world whose respect for ecological limits is woven into everyday life and culture and even subjectivity itself, and whose possibilities for self-realization are qualitatively different from our own. The critical green utopia has the enormously suggestive power to make us curious about what they eat and drink in this world, who they love and who they hate, as well as what social institutions and political decisions hold it together. As Libby Falk Jones points out in relation to Piercy’s work in particular, there is a focus on feeling and emotional engagement in the new critical utopias that distinguishes them from the “traditional utopian structure” which is “dominated by overtly rhetorical ends” (1990, p116). The critical utopia is, in different ways, primarily “mimetic” rather than “didactic” (Jones, 1990, p117). Knowledge is offered “dramatically” rather than through dialogue and declaration, such that the meaning of the novel aspires not simply to the status of statement but to that of “lived experience” (Khanna, 1981, p52). *Woman on the Edge of Time*, *Pacific Edge* and *Always Coming Home* imagine sufficiency and embeddedness from the bottom up, rooted in the everyday lives of characters and their relationships with others and with nonhuman nature. The possibility of empathy and immersion created by the narrative and emotional imagination expands the green utopian debate beyond the limits of the hypothetical blueprint, which itself challenges the global, administrative and ‘top-down’ discourse of sustainable development policy. De Lauretis suggests that this kind of utopian writing works through an “absurdly precise effort to materialize abstract hypotheses and dreams, to make them concrete, sensible and experiential in the here and now” (de Lauretis, 1980, p169), suggesting that there is something excessive and almost overwhelmingly detailed and vivid about the imagined world of the utopian novel. Similarly, Murray Bookchin has talked of the power

of utopia to make freedom “lurid and sensuously concrete” (Bookchin, 1982, p325). It is exactly this ability to convey experientially the textured qualities of an imagined world that enables the utopian visions of the narrative ecotopia to make a distinctive contribution to the sustainability debate. They tell us that a sufficient, embedded society is better for both humanity and nonhuman nature by showing us how it might be to live in that world.

CONCLUSION

The theories of utopia explored in this chapter illuminate the framework within which ecotopian narratives construct their visions of the future. Fictional utopian narratives work by creating a space for imagination, critique and desire for a different way of being, by holding the future open to multiple possibilities. In doing so they treat sustainability as a series of questions about how the good life for humans can be reconciled with ecological limits, thereby enlarging the cultural scope for envisaging sustainable ways of life. Ecotopian fictions do not simply illustrate or reiterate green principles for a sufficient society. They explore, activate or enact them through narrative, dramatising and representing what they might mean for everyday life. It is their capacity to offer experiential rather than cognitive approaches to sustainability that offers to build a bridge between our reality and the green utopian worlds of Piercy’s *Mattapoissett*, Robinson’s *El Modeña*, and Le Guin’s *Valley*.

The ways in which *Always Coming Home*, *Pacific Edge*, and *Woman on the Edge of Time* dramatise their sufficient societies will be explored in Chapter 6. My approach to the fictional utopia focuses on the experiential dimension, not least because here we find another link between ecotopian fiction and the ecopolitical discourse to which it is deeply related. That is, on the whole ecocentric philosophy embraces experiential in preference to cognitive ways of perceiving the world, rooting its prescriptions for sustainability in epistemologies of relationship over abstract argumentation. As Pepper has put it, “[e]motions and

intuitions are at least as important and valid as any other form of knowledge” in ecocentric approaches (Pepper, 1996, p13). As we saw in Chapter 3, deep ecocentrism argues that only identification with and empathy for nonhuman nature can overcome the binary logic that sets human well-being up in opposition to the integrity of the natural world. Whilst an ecocentric morality can be pursued through what Eckersley called the “axiological reasoning” of autopoietic intrinsic ethics, the “cosmological and psychological” routes offered by transpersonal ecology and cultural ecofeminism have generally had more resonance in emancipatory ecocentric discourse (Eckersley, 1992, pp60-61). Here, an experiential ethics is privileged, predicated on the possibility of experiencing the self as part of a bigger, interconnected reality. Thus an ecocentric culture depends on changes in consciousness that embrace a holistic orientation towards nonhuman nature; empathy and experience are at the heart of that ecocentric consciousness. The literary ecotopia, with its capacity to provoke identification with and empathy for its characters through narrative, offers to enact rather than simply re-describe this central insight of ecocentric philosophy.

However, elements of the ‘cognitive estrangement’ approach to the literary utopia are relevant to understanding the contribution that ecotopian fictions can make to sustainability debates insofar as the deconstruction and critique of industrial and technocentric ideologies lies at the heart of deep green conceptions of sustainability. This approach enables us to remain attentive to the ways in which the utopian text is systematically related to contemporary social discourses, practices and institutions, highlighting the ways that the text can function to displace the ideological blinkers of social context, marking out a space of potential opposition and critique. This ‘critical’ approach, focusing on the reflexive devices of the ecotopian narrative, will be central to the analysis in Chapter 5.

CHAPTER 5

Ecotopian reflexivity: apocalypse, progress and pastoral

INTRODUCTION

The wholesale ecological collapse predicted by some environmentalists in the 1960s never came, at least not in the apocalyptic terms favoured by extreme advocates of the limits and survivalist cases. The spectre of slow degradation and decay lingered, however, and as these environmental concerns were assimilated into the public consciousness, the shape of the future was reconfigured:

[n]o longer the haven of inevitable progress, and no longer the scene of apocalyptic wipeout, the future was now fraught with complex responsibilities for which no easy or coherent utopian narrative was appropriate.

(Ross, 1991, p141).

The critical, heuristic narratives of Piercy, Robinson and Le Guin reflect this new ambiguity in the field of utopian desire. In the shadow of the environmental crisis, green utopians sought to construct the possibility of a better way of living with nonhuman nature whilst negotiating three powerful discourses which had long colonised the imagination of the future. On one hand, they assimilate the ecological critique of the ideology of progress, discussed in Chapter 2. On the other, they seek to represent a resolution of the environmental crisis that transcends apocalypse or authoritarianism. Beyond these two poles, the ecological utopia faces a third problem - the extent to which the desire for a new harmony between human societies and nonhuman nature invokes conservative arguments for stasis or even regression to a pre-modern way of life, which I discuss here under the rubric of the pastoral. As we will see in the following paragraphs, none of these three future paradigms is adequate to the imagination of the sufficient and fulfilling society. In order to elaborate new possibilities for

human well-being that simultaneously enhance ecological integrity, the narratives of the future suggested by the tropes of progress, apocalypse, and the pastoral need to be interrogated and transcended.

Apocalypse and agency

As we have seen, the figure of apocalypse in the form of a catastrophic collapse of ecological support systems and, consequently, recognisable social life has loomed large over both green discourse and science fiction future scenarios. The green apocalyptic narrative, both (science) fictional and extrapolative (as in, for example, the outcomes of the Club of Rome's systems models; see Chapter 2), firstly, signifies the urgency and gravity of the environmental crisis and the need for radical action in response. The figure of the large-scale eco-disaster extrapolates from existing assessments of the state of ecological degradation to suggest in the starkest terms what might happen 'if this goes on'. Secondly, however, it can also effect, metaphorically, a fresh start in terms of the imagination of future social possibilities. The apocalyptic scenario can enable the transition from an unsatisfactory present to a preferable (or at least different) way of living to be scripted as a decisive break, allowing for the prescription of a particular socio-political system ostensibly on the grounds of necessity rather than desirability. In the survivalist environmental narratives reviewed in Chapter 3, the threat of wholesale ecological destruction functions to legitimate authoritarian or totalitarian solutions on the basis that there is no alternative; the spectre of catastrophe renders the free play of utopian desire unthinkable. Conversely, science fiction has often used the post-holocaust scenario to explore the possibility of non-repressive, communitarian, societies emerging from the ruins of advanced modernity, wherein a simpler and richer good life thrives away from the shadow of technology, the city, and the structures of global industrialism. In both versions, however, a fundamental discontinuity between present and future is figured which tends to devalue or disregard the importance of human agency, creativity and autonomy in the making a different kind of future from history and

the present moment. A utopia that favours agency over system, as Williams has suggested, depends on figuring the transition in terms of a “willed transformation” rather than as a response to an “externally changed world” (Williams, 1980, p196).¹

Perhaps unsurprisingly, the shadow of apocalypse, or at least of profoundly dystopian or disintegrating societies, hangs over all three of the ecotopian fictions at issue here. However, their narratives hint at apocalypse in order to foreground the possibility of and necessity for human choice and political agency in the process of building an alternative future, rather than to refute it. In Piercy’s *Woman on the Edge of Time* and Robinson’s *Pacific Edge* the possibility of holocaust and dystopia dog the boundaries of the novels’ utopian worlds. In both novels, however, the transitions from the exploitative, environmentally destructive and unsatisfying industrial capitalism of the late twentieth century to the rich, fulfilling and ecologically stable worlds of Mattapoissett and El Modeña (respectively) are explicitly figured as being contingent on political agency, embodied and symbolised in both texts by particular individuals, Connie Ramos and Kevin Claiborne. The relationship between Le Guin’s apparently timeless Valley (in *Always Coming Home*) and our present is rendered in a rather more oblique and stylised manner, but dystopia remains symbolically and reflexively in the margins of the text to remind us of the possibility of seeing beyond it. All three novels make clear that their utopian society has come into being as a result of human-social choices rather than *deus ex machina* - and, moreover, each novel explores the ways in which such choices, once made, do not ossify into history but continue to be dynamic and open issues within the life of the utopian society itself.

¹Indeed, Williams seems to suggest in his essay ‘Utopia and Science Fiction’ that only a world conjured through “willed transformation” constitutes a utopia proper; other modes of imagining a different future - the tropes of paradise, the “externally altered world”, and the “technological transformation” - are characteristic of science fiction generally (Williams, 1980, all quotes p196).

Progress and pastoral

As we have seen in Chapters 2 and 3, what unites deep green ideologues of all stripes is not simply the ethical stance that ecological degradation and depletion is wrong, but the belief that we can live more responsibly and more pleasurably with the nonhuman natural world. Similarly there is a perhaps surprising degree of agreement over the root causes of the current 'crisis': industrialism itself, along with its 'super-ideology, progress, is at the heart of ecological degradation and human alienation (Dobson, 1995, pp29-33).² Thus political ecology challenges the ideology of progress and a commitment to ceaseless economic expansion and technological development, and with it a framework of assumptions that the West has lived with for more than two centuries. They argue that real change in the direction of sustainability must be founded on a deconstruction of the idea of progress and a concomitant view of history as a linear process involving the constant improvement of our material conditions of life. Some green theorists simply critique the 'content' of the notion of the progress, seeking to sever its long-standing association with material growth and suggesting instead that human well-being is best pursued through addressing quality of life. Thus, development in the spheres of the arts, culture, relationships, spirituality, community and so on are proposed as alternatives to economic development and consumption oriented-lifestyles - all of which, it is argued, can happily thrive in the context of indefinitely stable or even decreasing overall economic activity. As we saw in Chapters 2 and 3, this tactic was widely adopted in the early development of the limits to growth thesis.

But many go further to attack the idea of progress at its roots, casting it as an inherently problematic mode of conceptualising time and human-social well-being. They challenge the assumption (or determination) that the future will

²This chapter continues to operate within the framework of the distinction between 'ecologism' and 'environmentalism' proposed in Chapter 2. 'Environmentalists' would not identify industrialism and economic growth as the 'causes' of environmental damage in anything like so straightforward a way.

bring improvements to the social conditions of human life, often drawing on conceptions of ecology that stress cyclical ways of experiencing and measuring the passage of time. In particular, a good deal of green criticism suggests that modern, progress-oriented views of history are implicated in instrumental ways of thinking that privilege the efficient achievement of ends over both non-instrumental values and satisfying and pleasurable means of achieving them.³ According to this approach, a fulfilling and sustainable way of life would be rooted firmly in the smaller rhythms and cycles of the everyday and of nature itself, rather than in hock to a future that means 'more' and 'better'. The costs of the rational pursuit of progress are here reckoned as much in terms of human alienation as ecological destruction. This is the tenor of much of the emancipatory ecology of the 1970s, evident in the works of, for example, Theodore Roszak, E F Schumacher and Ivan Illich,⁴ as well as the new ecological critique of developmentalism embodied in the work of Wolfgang Sachs. Ecofeminists in particular, such as Vandana Shiva, Judith Plant and Rosemary Radford Reuther, have drawn attention to the ways in which linear constructions of time-as-history and time-as-progress have tended to obscure the biophysical dimensions of being human and their interconnections with the rhythms and temporalities of nature.⁵

The deep green utopianism prevalent from the late 1960s onwards has thus been indissolubly anti-industrial in character. However, the idea of 'progress' has become indelibly written into the history of utopianism itself. For example, Tom Moylan has argued that contemporary post-industrial capitalism has effectively "enclosed utopian desire", reinventing it in the image of the "glittering surface" of consumerism and eliminating its "subversive...impulse as a negation of the present system" (Moylan, 1986, p16). From an ecophilosophical point of view,

³In Weber's terms, this is 'formal' rather than 'substantive' rationality.

⁴A useful summary of this bringing together of ecological vision and the counter-cultural critique of technocracy and instrumental rationality embodied in industrialism is found in Kumar, 1986, pp402-410.

⁵An interesting discussion of time and nature in the content of globalisation, risk and modernity can be found in Adam, 1996 and 1988.

however, the suggestion that utopianism has only recently been co-opted by the current value system is untenable. As we saw in Chapter 4, de Geus argues that throughout their history utopias have been in thrall to dreams of abundance and expansion, and ideal societies conceived in terms of sufficiency - "simplicity, restraint and moderation" - have constituted only a minor counter-tradition (de Geus, 1999, p21). However, de Geus' stark distinction between abundance and sufficiency oversimplifies the more ambiguous ways in which dreams and expectations of progress and plenty have been entwined with utopianism through its complex history. A useful way to address this question is to look at how different kinds of imaginative constructions of the future attempt to bridge what is often called the 'scarcity gap' - that is, the gap between peoples' needs and wants and the ability of nature and/or society to satisfy them (Davis, 1981 and 1984; Levitas 1990). Different traditions of utopian form and content have attended to the question of scarcity with very different assumptions, and with varied consequences for thinking about its implications for the ideal relationship between nature and society.

As we saw in Chapter 4, the two archetypal utopian texts are Thomas More's *Utopia* and Plato's *Republic* (see for example Kumar, 1987). Both are concerned with laying out the shape and institutions of the ideal state. However, alongside or underneath this classical 'total' utopia of perfect social organisation run traditions rooted in two early 'folk' or popular utopias - the myth of Arcadia, and the many-headed folkloric tradition of the Land of Cockayne, well-known in one of its American versions, 'The Big Rock Candy Mountain' (see Kumar, 1987, and Morton, 1969). Plato and More between them set up 'Ideal Republic' tradition of utopia, in which the good life is ensured through the institutions of the (variously autocratic and egalitarian) state. This tradition places its faith in reason and careful social organisation to channel human nature and bring about order and happiness, with human fulfilment being contingent upon order. By contrast, the Cockayne utopia is an anarchic and individualistic "hedonistic paradise", in which the good life consists of unlimited human desires being satisfied through

the imagination of “excess and superabundance” (Kumar, 1987, p7; see also Davis, 1981, and Levitas, 1990). Cockayne is fantastical (albeit often politically motivated), drawing on Edenic and other myths of an earthly paradise, in which there are “rivers broad and fine / [o]f oil, milk, honey and of wine”; where “[e]very man may drink his fill / [a]nd needn’t sweat to pay the bill” (from ‘The Land of Cockayne’ cited in Kumar, 1987, p9).⁶ The Arcadian utopia, on the other hand, is a more modest affair. The classical Arcadian myth (as seen, for example, in Virgil and Ovid) speaks to a pastoral perfection of “moderation and restraint” (Kumar, 1987). Here, the good life is pursued through the idea of sufficiency, that is, the temperate reduction of wants to a level at which nature can comfortably fulfil them (see also Davis, 1981 and Levitas, 1990).

Davis argues that the question of how to bridge the ‘scarcity gap’ is the key to collective social and political decision-making both in ‘reality’ and ‘ideality’. In Davis’s account, Cockayne, Arcadia, and the utopia proper (that is, the ideal republic) approach the scarcity gap in fundamentally different ways. Cockayne and Arcadia solve the problem of scarcity by “idealising nature”, imagining, on the one hand, absolute abundance and immediate gratification, and on the other moderate bounty and “temperate appetites” (Davis, 1984, pp8-10). The ideal republic, however, idealises social organisation. Davis argues that only the systematic, ‘total’ utopia realistically faces up to the basic problem of scarcity, which cannot truly be solved, only institutionally managed. Other forms of ideal society are escapist; they merely wish the problem of scarcity away. Thus on Davis’s definition utopia is an inherently static and closed solution to the social problems of production and distribution; it is the end of politics (Davis, 1984 pp8-10; Davis 1981).⁷

⁶Compare this sample of the lyrics of ‘Big Rock Candy Mountain’, a “bum”’s or hobo’s paean to a life of ease, plenty, idleness and ineffectual social control: “There’s a lake of stew / And gingerale too / And you can paddle all around / In a big canoe / In the Big Rock Candy Mountain” . This version is attributed to Harry McClintock; the lyrics are reproduced at <http://ingeb.org/songs/onasumme.html>.

⁷It should be noted that Davis’ account includes two other species of ideal society - the self-explanatory religious “Millenium” and the “perfect moral commonwealth”, which imagines the solution to the collective problem of want in terms of the “moral reformation” of each individual

Davis's definitional arguments and rather problematic evaluative schema notwithstanding, it is clear that these different traditions for imagining better futures have had significant consequences for the ways in which we can envisage sustainable or sufficient future societies. In particular, certain characteristics of the ideal republic have been prominent in utopian philosophy and narrative over the last two centuries, latterly combining in interesting ways with Cockayne's myths of abundance. Two features of the institutional, systems-building approach to utopia are relevant here. The first is its tendency to treat the utopia as a blueprint, leading to the representation of the ideal society in terms of closed, static perfection. The second is its faith that the good life can be realised through the application of instrumental rationality, precisely the worldview that deep ecologists claim has legitimated human domination and exploitation of the natural world; indeed, it is notable that nature in effect disappears in Davis's account of the utopia proper as a "total social environment" (Levitas, 1990, p164; Davis, 1981, pp18-22).

The assumption in the ideal commonwealth that the power of applied rationality can bring about a fulfilled society is shared and extended in the utopias of the sixteenth and seventeenth centuries. The most notable, Tommaso Campanella's *City of the Sun* (1602) and Francis Bacon's *New Atlantis* (1627), assimilate science into the utopian mode. Indeed, it could be argued that through the zeal of Bacon's devotees, *New Atlantis* transforms the philosophy and practice of science itself into a kind of utopia, dedicated to "the effecting of all things possible" (Bacon, cited Kumar, 1987, p30). Science offered the hope that "pure knowledge of nature and universality" would restore to men [sic] the power to create their own good life on earth (Bacon, cited Kumar, 1987, p29). The scientific vision of

such that each person limits their own needs or appetite to what is available (Davies, 1981, p21; Levitas, 1990, p162). The implications of the 'perfect moral commonwealth' for questions of ecotopian sufficiency do not significantly differ from the Arcadian utopia, and I therefore do not treat it separately here. It is also useful to note that whilst other utopian theorists recognise some of the categories of ideal society proposed by Davis, his evaluative scheme is unique, as is his decision to define utopia itself with reference solely to the institutional, total form.

utopia shifted the utopian ground from pure desire (the Platonic ideal of *The Republic*) to the hope of achievement (Kumar, 1987). In parallel, the dawning of the Enlightenment sees the utopia profoundly affected by the emergence of the idea that society itself is a “human artefact” and, concomitantly, by “the idea of progress” (Levitas, 1990, p194); not coincidentally, this is also the point at which the locus of utopia generally shifts from the spatial to the temporal plane (see also Goodwin, 1978; Kumar, 1990). Historically, utopia has been caught up in notions of systematic improvement from More onwards.

The alignment of utopia with ideas about progress and the inscription of the good life as a future goal rather than a diffuse and rather abstract hope is most fully realised in the “most utopian century of modern times”, the nineteenth (Kumar, 1987, p33). Throughout the nineteenth and the first half of the twentieth century, the content of the utopia became inextricably linked with a particular ideology, socialism. There were other, competing, utopias, of course, but the “comprehensiveness and appeal” of the socialist vision, its explicit focus on the imminent possibility of a better way of living for all through community of property and labour meant that for a time, at least, socialism rewrote the modern utopia in its image (Kumar, 1987, p49; 1993; Levitas, 1993). The nineteenth century socialist utopia combined an egalitarian ethos with a focus on the material sphere, bolstered by a faith in science and more particularly technology to realise the conditions of the good life. These visions appear in the philosophy of Marx,⁸ Saint-Simon, Fourier and Owen, and later in the novels of Edward Bellamy

⁸The inclusion of Marx in a list of utopian socialists is of course somewhat contentious, given his and particularly Engels’ notorious ambivalence towards idealist utopian dreaming (whose function, they argued, was compensation and escapism), and insistence that only a ‘scientific’ analysis of material conditions and interests could point the way to a future communist state whose existence was in any case to some extent already determined by the objective necessity of historical forces (see Engels’ *Socialism, Utopian and Scientific*, 1977, first published 1893). Some utopian theorists, however, have come to see Marx’s project as a utopian one, and to re-read his rejection of the utopian mode outright as a pragmatic response to specific historical and political debates (Geoghegan, 1987; Kumar, 1990, 1987; Buber, 1958). From the perspective of Levitas’s definition of utopia as the expression of desire for a better way of living and being (rather than a detailed vision of a better future), we can situate Marxism within the broader socialist tradition, sharing its desire for a form of society that transcends inequality, alienation and oppression.

(*Looking Backward*, first published in 1888), William Morris (*News from Nowhere*, first published in 1890), and H G Wells (*A Modern Utopia*, first published in 1905), to indicate just the most well-known. Utopian communities were established in both Europe and United States, for example the experimental societies founded by Robert Owen in Manchester and at New Lanark in the 1920s and 1930s, and the New England Transcendentalists' socialist-inspired Brook Farm in the 1840s (Kumar, 1990, pp80-91).

Utopia became so closely associated with the history of the socialist project in the nineteenth and twentieth centuries that the two are often conflated (Levitas, 1993; Kumar, 1993). This has important implications for utopianism and utopian studies, not least regarding the ways in which the decline of socialism alongside the other so-called 'grand narratives' of modernity has led to premature and greatly exaggerated claims of utopia's death. My focus, however, is on the extent to which, by the middle of the twentieth century, utopianism had become colonised by what we might call a 'productivist' paradigm. In this case, it is less the socialist desire to redistribute wealth that cements utopia's association with abundance, but rather the extent to which socialism itself is a product of modern assumptions about the desirability of basing future redistribution on present 'progress', that is, on productive expansion powered by technological development. We see here the proximity of the socialist utopia and its capitalist antipode, mentioned by Moylan at the beginning of this section. Following the deep green critique (see discussion in Chapter 3), socialism shares with capitalism both a material logic of expansion and an ideological faith in economic growth, accompanied by technocratic and administrative organisation, to bridge the scarcity gap. Of course, there are vast differences in the distribution of the spoils (competitive individualism vs egalitarian cooperation), but insofar as both are caught up in the desire for a better way of living through expansion, both channel utopia through the idea of abundance. Here, abundance is not located in nature itself, as in the Cockayne fantasy; rather, it is taken to be an outcome of the distinctively human capacity to use nature instrumentally through industrial

production. An example of the only superficially uneasy alliance between Cockayne and instrumental rationality might be found in William Morris's *News from Nowhere* (1890), which the utopian theorist A L Morton describes as an instance of the fantasy of Cockayne achieved through Communism, a lesson in how socialised systems of distribution can make nature's bounty available to all. Similarly, the utopia implied in Marcuse's *One Dimensional Man* (1964) is predicated on, if not abundance, then certainly a comfortable material sufficiency; whilst commodification and technological rationality were to be deplored, technology itself was essential to "the liberation of society from its historic condition of material need" by providing for widespread affluence (Kumar, 1987, p402).

Thus persistent assumptions about the abundance of nature are deeply embedded in utopian visions of better societies, although the Cockayne myth of inherent natural cornucopia has been largely superseded by the promise of abundance guaranteed by humanity's transformation of nature through industrial production. The problem for the green utopia, then, is this: if nature is not, as in the myth of Cockayne, the source of endless abundance and material well-being, and if nature does not signify a challenge, an object which can be made to yield up its generous stock to humanity through the application of rationality, then what is it, and how do we best live with it? The problematic of the ecotopia is at heart the imaginative reconstruction of human society's relationship with a much less giving nature than that usually invoked in the utopian tradition. Moylan has addressed the ways in which the critical utopia responded to the ideas of progress and expansion built into the utopian discourses associated with consumer capitalism (Moylan, 1986; see Chapter 4). He argues that the left-liberal utopias of the new social movements era adopted reflexive, meta-textual tactics in order to interrogate the utopian tradition itself. From a deep green perspective, however, we might add that the ecological utopia must adopt the same strategies in order to critically deconstruct the assumptions about nature, industrialism and progress and history built into the utopian tradition. The question then becomes

one of how the ecotopia transcends the compelling future discourse of progress without lapsing into static conservatism.

The parallels between the Arcadian model of utopia and the picture of sustainability of deep green philosophy are clear. In both, nature is generous within limits, and humanity adapts to live harmoniously with it. Elements of the Arcadian tradition are clearly visible in the 'utopia of sufficiency' that de Geus identifies in the work of Thoreau, Morris and Callenbach, for example (de Geus, 1999). Human well-being here is not contingent upon systems or external order (as in the ideal republic), nor upon superabundance and satiation (as in Cockayne), but upon organic adaptation and interdependency. However, the Arcadian ideal is not without its problems, either as a literary mode or a sociopolitical utopia and, once again, the ecotopian fictions under discussion here have in different ways attempted to critique its limits and move beyond it.

In seeking a way out of the 'trap' of developmental, progressive or rational-instrument ways of thinking, ecotopians have been accused of simply retreating into regressive or romantic fantasies of rural idylls that have often been dismissed as ahistorical, escapist, or stultifying. The ideal of a harmonious, simple society embedded seamlessly in its natural setting elicits two kinds of criticisms. The first is largely practical, and concerns the question of human well-being. Could anyone be truly happy living in the small-scale, decentralised communities envisaged by radical emancipatory ecocentrism, lacking a complex and multi-layered social structure, exciting and anonymous metropolises, the pleasures of consumption, technological developments, and self-invention? Wouldn't such a society be too small (and too small-minded), too claustrophobic, too prone to confinement and surveillance⁹ to be truly satisfying (Dobson, 1995, p119)?

⁹As many other commentators have noticed, *The Ecologist's* 'Blueprint for Survival' is a good example of how deep green discourses of community frequently include anti-emancipatory methods of social control.

The philosophical dimension of the critique of deep ecophilosophy's model of sustainability focuses on the extent to which it presents either an ahistorical and static rural idyll, or idealise a blinkered vision of pre-industrial forms of society. In either case, the roots of this picture of natural benevolence and organic unity are widely held to be more myth than reality; a myth, moreover, that is usually associated with nostalgic and conservative ideologies. In this respect, Arcadian and deep green utopian visions are closely associated with the literary genre of the pastoral. Although it has Greek roots, the pastoral originates in English literature with Edmund Spenser ('The Shepheardes Calendar', 1598), continuing through the end of the Renaissance and into the Romantic period (Gifford, 2002, pp53-55). Throughout its many transformations, the pastoral has been seen as the romanticisation of an imagined world. Born out of "aristocratic privilege and élite cultural protestations", it fails to engage with "the actual conditions of rural life or the wider political landscape within which it stands" (Westling, 2002, p3; see also Williams, 1973) - an attitude closely connected with what has been seen as the often unreflexive naturalism of contemporary ecologism, an argument articulated in, for example, Soper's (1995) *What is Nature?*. The pastoral imagines a countryside enduring out of time, vaguely pre-modern yet simultaneously eternal, a symbol of stability and permanence in the face of a ceaselessly changing world. As Williams argues in *The Country and the City* (1973), pastoral visions present nature as a retreat; the aestheticised idea of its existence as an object of contemplation and source of pleasure and tradition is apt to obscure the material and social conditions of rural life, as well as the complexities of its interdependence with the urban.

Similar criticisms emerge from within ecopolitical philosophy; as O'Riordan observes, the "nature image" often functions as "an escape from an uncertain future and a refuge from a decadent, unjust society, purposes it has served since the days of ancient Israel" (O'Riordan, 1981, p11). Drawing on Santmire's

work,¹⁰ he explores the ways in which the “cult of the simple rustic life” adopted by environmental activists has been the privilege of a wealthy élite and has tended to be apolitical and conservative (Santmire, cited in O’Riordan, p11). The spectre of the pastoral makes its presence keenly felt in attempts to analyse the green themes of the utopias that emerged in the early seventies. Kumar (1982), for example, criticises some of the (green) feminist utopias of this period, including Piercy’s *Woman on the Edge of Time*,¹¹ on the grounds of their “primitivism” and desire to return to the “myths and mores” of pre-industrial societies (Kumar, 1981, p62). Their “mystical” attitude to the prospect of an unproblematic harmony between humanity and nature, he argues, is indicative of “impotent nostalgia” and “escapist fantasy” (Kumar, 1981, p66). Kumar suggests, rather, that only modern industrial societies and the development of science and technology can bring about the conditions for the emancipation and self-realisation sought by the feminist movement.

However, rewriting the future outside the dominant discourse of progress does not necessitate falling into an unreflexive Arcadianism. In the first place, it should be stressed that many deep green theorists insist that their visions of a sustainable society are *post*-industrial, that is, they focus on how society might move beyond the environmental crisis rather than capitulate to a nostalgia for earlier, simpler times. Ecotopian theory has, on the whole, “resisted the temptation to turn to into a primitivist utopia of a Rousseauist kind. It has looked to a post-industrial future not a pre-industrial past” (Kumar, 1987, p414). Whilst recognising the value of some aspects of pre-industrial life, radical ecology is not seeking a reversion so much as a distinctive fusion of ‘organic’ community and democratic modernity; as one of the characters in Piercy’s *Woman on the Edge of Time* puts it, ecophilosophy attempts to “put the old good with the new good into a greater good” (Piercy, 1979, p71). The second way in which the novels in particular

¹⁰H P Santmire (1973) ‘Historical Dimensions of the American crisis’ in (ed) I G Barbour *Western Man and Environmental Ethics*, Reading, Mass; Addison-Wesley.

¹¹Sally Miller Gearhart’s *The Wanderground* (1985; first published 1979) is perhaps a more appropriate focus for Kumar’s critique.

eschew the pastoral relates to the issue of literary form or genre. The pastoral is a static mode which seeks to present the eternal verities of a place out of time. Whilst the green utopia does reclaim aspects of the content of pre-industrial society for its picture of sustainability, it does so by pulling them out of their original context and re-setting them in relation to contemporary debates. Key to this recontextualisation in all three ecotopian novels is the reflexive thematisation of time, history and change as a central aspect of their narratives.

This chapter explores the ways in which the reflexive devices deployed in the fiction of Piercy, Robinson and Le Guin enable the deconstruction and rethinking of the future in terms outside the three outlined above. These novels enact a meta-commentary on the speculative genres (sf and utopia) within which narratives of the future have been inscribed, as well as confronting the ideological formations which conventionally construct our sense of future possibilities. The self-conscious and critical discussions of generic futurities in these narratives clears a space from which the future can be thought from a different perspective. As Moylan's work has suggested (1986; see Chapter 4) this process begins with a critical interrogation of the forms and conventions of the literary utopia. What makes the novels self-conscious and reflexive is also what enables them to find a new mode of envisioning a green future. In the work of Piercy, Robinson and Le Guin we also find a thoroughgoing engagement with linear notions of history and the complex relationships between past, present and future. By focusing on the politics of desire and agency, these green fictions reject the sterile binary of progress and pastoral in favour of a new synthesis that makes sufficiency both imaginable and desirable.

FORWARD, INTO THE PAST?':

THE DYNAMICS OF HISTORY IN *WOMAN ON THE EDGE OF TIME*

History in Piercy's novel is never singular, nor is it a straight path; rather, *Woman on the Edge of Time* features multiple pasts, presents and futures linked together in a knot of dystopian threats, utopian desires and political agency. The temporal discourse of *Woman on the Edge of Time* is one of complex and contingent relationality, rather than linear causality, involving complex time-shifts and dynamic interrelationships. At the heart of the narrative is a temporal structure rather like a "twisted braid" (Bartkowski, 1989, p53). With its protagonist, Connie Ramos, the reader moves between presents and futures, pausing frequently to consider the past. The two main worlds of the novel - utopian Mattapoissett, a society existing somewhere in Massachusetts in 2137, and Connie's New York circa 1976 - co-exist in what Moylan has called a "pattern of mutual influence that spirals like a double helix beyond binary closure" (1986, p142). Whilst Connie's capacity for personal transformation and willingness to struggle for a better world are fed by her utopian encounter, Luciente (her utopian 'guide') in turn explores the past "to enlist help in the ongoing revolution to assure that a progressive line of history remains" (Moylan, 1986, p142).

Piercy makes the case for a utopian transformation of Connie's New York world in no uncertain terms, using the language of "critical realism" and in "naturalistic detail" (Moylan, 1986 p122; Ruppert, 1986, p136). Though not without its small pleasures, life here is bleakly urban, hostile and alienating. As an unemployed Chicana woman, she finds herself at the bottom of a 'hierarchy of oppressions', and is eventually committed to a psychiatric hospital, where the practical and ideological power structures that shape her life are rendered all too concrete. But there are threats and troubles in Mattapoissett too, which is fighting a border war with dystopian forces of technological control, and which must make crucial choices about its own future uses of genetic technologies. Within this dialectical and reflexive structure, the novel's representations of both 'reality' and utopia

foreground openness, change and human agency, as well as rendering unstable the concepts of progress, history and stasis. Thus *Woman on the Edge of Time* makes a space where the sustainable utopia can be imagined beyond discourses of future-as-progress and past-as-pastoral. Two aspects of the novel demonstrate particularly clearly its engagement with history, progress and pastoral. The first concerns Connie's initial arrival in Mattapoissett and explores the expectations she brings to this future and Mattapoissett's own apparently contradictory place in linear conceptions of development. The second highlights Mattapoissett's ambiguous temporal character more closely, examining the consequences of its 'quantum' existence for the wider discourse of the novel and the possibilities for a radical sustainability.

The 'future perfect'

The scenes in which Connie Ramos first arrives in Mattapoissett work through the juxtaposition of a number of possible futures and remembered pasts, 'real', utopian, and imagined. Connie's first encounters with Mattapoissett come as Luciente, a person from the future, makes (telepathic) contact with her in her own place and time (in fact, her apartment). This initial "intrusion of utopia into the real world" (Ferns, 1988, p462) unsettles the didacticism and reification of the utopian blueprint built into the traditional 'visitor/guide' structure (see Chapter 4), setting up the fluid, dynamic relationship between 'reality' and utopian desire that dominates the novel. This destabilisation is continued when Connie finally joins Luciente in Mattapoissett itself. The low-impact, rural and agricultural settlement of Mattapoissett is unrecognisable to her as 'the future'. There are "[n]o skyscrapers, no spaceports, no traffic jams in the sky" (WOTET¹² p68). Instead, she finds small-scale housing, mainly constructed out of recycled materials ("scavenged old wood, old bricks and stone and cement blocks"), overgrown with vegetation and overrun with goats, dogs and chickens (WOTET pp68-69). Piercy

paints a picture of the sustainable future in terms of a vision of fecundity and continuity between human settlements and the natural landscape. What disrupts this smoothly idyllic pastoral aesthetic are Connie's expectations of a dense, hi-tech, dehumanised future, and it is in aesthetic terms that Piercy explores ideas about future and past in terms of the visual signifiers of time and place.

Connie brings to Mattapoissett a set of assumptions about the future familiar from science fiction narratives. What, she asks herself, "did I expect from the future?...Pink skies? Robots on the march? Transistorized people?" (WOTET p73). Mattapoissett is thus described from the outset in terms of the absence of "[r]ocket ships, skyscrapers into the stratosphere...[and] glass domes over everything" (WOTET, p68). These images are intimately bound up with a vision of the "future perfect" that has its roots in the US science fiction of the 1930s and fed the public discourse of a "tomorrow's world planned and designed by technophiles" that Ross argues constructed the dominant futurology of the West in the mid- to late twentieth century (Ross, 1991, p101). The streamlined 'look' of progressive futurism becomes a fetish denoting an unshakeable faith in technological progress, the "semiotic ghosts" of which continue to haunt popular cultural and science fiction evocations of the future (Ross, 1991, p101). Ross examines how William Gibson's story 'Getting out of the Gernsback Continuum' (1986)¹³ deconstructs the suturing of the future into this progressivist mode by using the 'dirty/noir' aesthetic of cyberpunk to stand for the deterioration of dreams of a shiny new future. *Woman on the Edge of Time* too enacts an exorcism of its ghosts as Connie's expectations of future progress, with technology as its dynamo, slowly give way to a hope for a very different kind of future. The deconstruction of futuristic science fiction tropes allows the novel to incorporate a critique of the dream of utopia through technology.

¹²Throughout Chapters 5 and 6, references to the novels will be made using the following abbreviations: 'WOTET' (*Woman on the Edge of Time*), 'PE' (*Pacific Edge*), and 'ACH' (*Always Coming Home*).

At the beginning of *Woman on the Edge of Time*, Connie embodies the expectation that the future will be a high-tech, urban and consumption-oriented extension of the present. The line of 'progress' that connects modernity with the hyper-modern future also links Connie to her own immigrant past in Texas, and, further back, to her grandparents' origins in rural Mexico (WOTET, p73). Thus Piercy interweaves a large, social-historical discourse of progress with a smaller, more personal set of expectations common to post-war western democracies - that is, that each generation will improve upon the material conditions of life of the previous one. As Connie puts it, "a better world for the children - that had always been the fantasy; that however bad things were, they might get better" (WOTET, p73). But progress doesn't look like Connie has come to expect. For her, Mattapoissett can represent only a regression along the line of progress, or the aftermath of an apocalyptic failure of industrial modernity; maybe, she thinks "we blew ourselves up and now we're back to the dark ages to start it all over again" (WOTET, p68). Elsewhere in the novel Connie encounters the world that might have led to "that big war with atomic bombs they were always predicting" (WOTET, p69) when she stumbles into an alternate timeline. Piercy uses this encounter to build into *Woman on the Edge of Time* a sketch of the dystopian flipside of progress: a terrifyingly denatured and dehumanised world.¹⁴ Here, the natural environment is uninhabitable and pollution has reached an epic scale. Genetically and cybernetically modified individuals live in a strictly hierarchical and segregated society. The "richies" at the top inhabit off-world space platforms, cocooned from the crisis in nature and the human consequences of their luxurious lifestyle; at the bottom, a vast underclass of "duds" barely survive raw exposure to the dangerous, unconditioned environment, constituting little more than "walking organ banks" for the rich and their "mid-level" lackeys (WOTET p291 and 297). This grimly technocentric world is the extrapolative dystopia that haunts the discourse of *Woman on the Edge of Time*, its 'apocalyptic horizon'.

¹³Hugo Gernsback famously edited the American science fiction magazine *Amazing Stories* during the formative years of the genre.

Simultaneously, however, Connie sees Mattapoissett simply as a regression, and she asks Luciente if she's sure they "went in the right direction" (WOTET, p68). This future looks and feels like the past - semi-rural, small scale, and rustic. In particular, it looks like Connie's immigrant past, and these people look like her ancestors:

Goats! Jesus y Maria, this place is like my Tio Manuel's back in Texas. A bunch of wetback refugees! Goats, chickens running around, a lot of huts scavenged out of real houses and white folks' garbage... all that striving and struggling to end up in the same old bind? Stuck back home on the farm...That's where my grandparents scratched out a dirt poor life! It depresses me.
(WOTET, p70).

Key to the plot of *Woman on the Edge of Time* is the process by which Connie accepts Mattapoissett as a desirable future. Piercy dramatises Connie's coming to consciousness by lacing together familial and historical discourse, as we saw above, so that her acceptance of Mattapoissett is figured in the symbolic act of 'giving' her lost daughter Angelina to this "Podunk" future. Of course, the very existence of Mattapoissett enacts a critique of the ideas of progress that have shaped Connie's reality and her hopes for the future, as in the 'cognitive estrangement' approach to utopianism. Mattapoissettans, like most utopians, are also keen to explain their values and philosophy to their visitor. They rage against the "Age of Greed and Waste" in which their "ancestors" choked the rivers and seas with garbage, sucked "water out of the earth, dirtying it and poisoning it as it flowed" (WOTET, p151). But this critique of progress is inadequate if Connie continues to see the alternative as regressive and undesirable. The narrative must also deconstruct the ways in which the values of

¹⁴Piercy's later science fiction novel, *Body of Glass*, explores this 'denaturing' of the world more thoroughly, alongside intimations of a still recognisable but more ambiguous and marginal ecotopia.

radical sustainability are caught up in Arcadian discourses. The next section explores how the aesthetic pastoral of Piercy's utopian village is revealed to obscure more complex and challenging admixtures of past and present, nature and technology.

At the discursive level, Piercy's novel resists the pastoral mode insofar as both its political discourse and its narrative are predicated on the existence of an environmental crisis. Mattapoissett does not embody the painless restoration of a traditional or pre-modern way of life; rather, it must negotiate the deliberate and often difficult reconstruction and repair of an already fallen world. The timeless and essentially harmonious relationship between human societies and nonhuman nature presented in Arcadian tropes has already been systematically and fundamentally disrupted. *Woman on the Edge of Time* dwells on the impoverished and dangerous environment of Connie's everyday reality in New York; Luciente is shown to react almost viscerally to its noise, dirt and crowds, which "shake [her] to the bone" (WOTET, p41). But although Mattapoissett at one level offers an escape or romantic refuge from that reality (and indeed in some parts of the narrative functions as such for Connie), its consequences intrude into the utopia itself. Thus even utopians must confront the legacy of wholesale ecological exploitation and widespread pollution, take part in making "reparations" to those areas with the worst damage, and look forward to a time when "[t]he oceans will be balanced, the rivers flow clean, the wetlands and the forests flourish" (Luciente, WOTET, p328).

In her analysis of *Woman on the Edge of Time*, Jones contrasts Piercy's novel with Charlotte Perkins Gilman's *Herland* (1992; originally published in 1916). Gilman's gentle first wave feminist utopia paints a bucolic picture of a matriarchal society living in close harmony with nature conceived of and cultivated as a vast, fruitful garden. As Jones observes, however, both Gilman's imagined society and her fictional mode are static and "pastoral" (Jones, 1990, p118). One of the ways in which Piercy's novel transcends the pastoral is by

offering a dynamic narrative which foregrounds plot over description in the characteristic manner of the critical utopia. The narrative drive of *Woman on the Edge of Time* is rooted in Connie's representation not as passive utopian visitor, but as an agent whose self-realisation and, ultimately, capacity for political activism is crucial to the very existence of the utopia. Her resistance to being processed and subdued by the psychiatric institution to which she is committed, and her interventions in Mattapoissettan life, form the basis of an engaging plot.

Similarly, Piercy presents a utopian society that is itself reflexive and open to change. Although Mattapoissett is founded on a distinctive set of shared values and goals, it encompasses a high degree of internal debate about ideological and ethical issues, debates all the more significant because of a political system that allows individual voices to matter. The most important instance of real disagreement in Piercy's utopia is the 'Shaper-Mixer' debate - a discussion about the degree of conscious human design that should be allowed in genetic manipulation - that runs throughout the novel. This plot device, through a relatively minor one in the context of the novel as a whole, nonetheless illustrates the extent to which a society can be 'utopian' and yet remain open to change, rather than be fixed in static perfection. Piercy extends this device to show that even citizens in a utopian society retain a utopian impulse. In the speech quoted above, for example, Luciente goes on to articulate, rather wistfully, her hopes for a better future when the "gross repair" to the environment is done:

[then we] can quarrel joyously with each other about important matters of ideas and art. The vestiges of the old ways will fade. I can't know that time, any more than you [Connie] can ultimately know us
(WOTET, p328)

By having her characters engage creatively and critically with their own possibilities and with desired futures that are in principle unknowable and unreachable, the narrative reflects critically on the general status of utopia as

prediction or blueprint, and thus reconfigures the status of its own utopian society. Utopia is understood as process rather than product; the narrative self-consciously presents its better society as an elaboration of utopian desire rather than an objective state of perfection. For Mattapoissett's utopian citizens, as for the utopia's readers, the content of utopia itself remains a hope on the horizon that might be approached but never achieved. The static perfection of the pastoral as a literary genre, then, is rigorously rejected by the discourse of *Woman on the Edge of Time*.

On the other hand, it is evident that Piercy's utopian figure (Mattapoissett; the *content* of her utopian society) embodies recognisable elements of green pastoralism - low-impact, decentralised, naturally embedded ways of life. However, *Woman on the Edge of Time* envisages rural communitarianism co-existing with liberatory forms of social arrangements, challenging the assumption that small-is-beautiful means small-is-repressive. Social and political networks in Mattapoissett are organised to decentralise rather than concentrate power, resulting in a vibrant grass-roots politics. As a feminist utopian, Piercy is especially keen to challenge the patriarchal power of the nuclear family, which has been replaced in *Woman on the Edge of Time* by extended networks of (mainly) long-term friends and rather more short-term lovers. Potential parents choose whether and when to mother and do so in friendship groups of three, supported by the community networks embodied in the "children's house" whose function is an imaginative mix of childcare and education. Thus, the idea of a simpler, more 'natural' and communitarian way of life is seen not as suffocating and regressive but is infused with emancipatory politics and a radically post-modern social structure.

Similarly, whilst Mattapoissett is built on a material foundation of agricultural self-sufficiency and small-scale production, it simultaneously embraces aspects of high technology, in particular information and communications technology. In line with most deep ecological positions (See Chapter 3), Piercy exclude all forms

of 'high' and highly centralised technology from the novel's utopian universe. However, the novel's critique is focused on the social contexts of technology, on the power of scientific discourse and technological hardware to shape individual and social lives. Piercy's depiction of science and technology in the novel is therefore a complex one. Mattapoissett uses sophisticated forms of biological and genetic technology, both in agriculture and in the sphere of conception, but Piercy marks its limits by imagining complex debates about the uses of any such technology, as in the 'Shaper-Mixer' debate mentioned above, as well as by dramatically detailing the repressive consequences of biological technologies applied by the powerful to the powerless in the very different contexts of Connie's experiences in psychiatric institutions and the bodily modifications of subjects in the aggressively technocentric modernity of Gildina's future.

However, Piercy clearly sees the liberatory potential of certain technologies, especially insofar as they are able to offset some of the disadvantages of decentralised and small-scale communities. Her invention of a personal information and communication technology device, the kenner, is a good example of her approach in this respect. The device, worn on the wrist, provides access to a large "encyclopaedia" or "knowledge computer", as Luciente describes it (WOTET, p64). It allows for immediate, real-time person-to-person communication, and links to systems for the transmission of written and visual messages in the home. The kenner allows extensive and multiple contact with other individuals and communities across space, expanding the scope and possibilities of an individual's relationships far beyond their deeply rooted communities. Equally importantly in the narrative, the kenner enables relationships across time. Luciente is dependent on her kenner to communicate with Connie across a vast cultural as well as a temporal gap; it provides her with vital information about her history, which is also of course Connie's present. These features of Mattapoissettan life enable Piercy to stress the contingency and particularity of the 'solutions' to sustainability that the novel presents, and in

doing so firmly distances her utopia from the enduring and essential patterns of life connoted by the pastoral.

Woman on the Edge of Time, then, recognises the limits and problems associated with the pastoral both as literary genre and in relation to the romantic idea of the rural idyll that often underpins deep green fantasies of sustainability. In particular, Piercy takes issue with the ways in which fictional utopias have all too often presented their ideal societies as static models of perfection, the logical outcome and 'end' of progress or a return to enduring and essential relationships with nature. Both of these factors contribute to a picture of a decentralised, steady-state political economy that enables rather than denies 'development' in the spheres of social relationships, culture, communication and the art of everyday life, as indicated by advocates of the limits to growth argument and its development in emancipatory ecophilosophy.

On living in a 'crux-time'

The second main strategy through which Piercy addresses questions of history, progress and the nature of utopia in *Woman on the Edge of Time* is by making ambiguous the ontological status of Mattapoissett itself. Piercy's utopia is only a "probability" and the narrative constantly questions its very existence. As we saw above, the openness - or fragility - of Mattapoissett comes partly from its internal ideological dissonance. But the narrative also explores its geographical, temporal and conceptual boundaries by introducing conflict at its borders and margins. Spatially, Mattapoissett and its sister communities face a threat from the depleted remains of the power blocs of our own times. From their "limited bases" on "the moon, Antarctica [and] the space platforms", they wage an often violent war of attrition over the few remaining contested areas on earth. The danger of the ultimate triumph of the 'old values', however, is manifested temporally as well as spatially, such that the past too is a "disputed area" (WOTET, p267). Connie's

time-travelling visits to Mattapoissett have the potential to retrospectively affect the future. As Luciente's friend Barbarossa carefully explains:

“at certain cruxes of history...forces are in conflict. Technology is imbalanced. Too few have too much power. Alternate futures are equally or almost equally possible...and that affects the... shape of time.”
(WOTET, p197; ellipses in original).

The possibility of “alternate futures” is not simply a dark threat voiced by utopian characters. It is dramatically conveyed towards the end of the narrative when the revolutionary possibilities in Connie's time are compromised and the Mattapoissett future temporarily “wink[s] out” (WOTET, p266). Lines are crossed and Connie finds herself in Gildina's dystopia. Later on, she is transported to a superficially similar future, peopled by her Mattapoissettan friends; this time, however, the utopians are losing their war with the reactionary forces. As Luciente suggests, “probability static” seems to be interfering with Connie's connection to Mattapoissett, and its secure status as the ‘real’ future is being undermined by fluctuations in historical forces - specifically, the immediate threat posed to Connie's integrity and consciousness by the asylum's threat to implant mood-controlling electrodes into her brain (see WOTET p126).¹⁵

Mattapoissett, then, has to “fight to exist”, to “be the future that happens (WOTET, p196; p198). Connie's involvement in the utopian future represents the cyclical hope that Mattapoissett will awake in her a revolutionary consciousness that she will take back into her own time in order to struggle to make Mattapoissett come to exist.¹⁶ Futurity and utopian desire are engaged in an open-ended dance across time, and no single ‘outcome’ of history is guaranteed, even, as in the novel, when it appears to concretely exist. Piercy builds her utopia on the notion of

¹⁵Moylan (1986) argues that the biological technologies of control deployed by psychiatric institutions in *Woman on the Edge of Time* - and the electrodes in particular - work as material symbols of ideological dominance more generally. Implantation signifies the literal internalisation of social control.

ongoing political struggle, or 'permanent revolution'. *Woman on the Edge of Time* ceaselessly elaborates the implications of this concept. It is clear from the way that Mattapoissetans celebrate their own history, for example, that it is concerned not simply with naming significant events and people in the revolutionary past that, in one timeline at least, led to them. Rather, they seek to enact rites and rituals that "body" the struggle, to keep the idea of it alive through identification. Most important, however, is Connie's own journey which encompasses both dramatic shifts in time and a much slower unfolding of political agency. It is the idea of utopia itself that produces the oppositional subjectivity Connie ultimately embraces. Her journey takes her from a repressive and unsatisfactory present, which she experiences as natural and unchangeable, into a future of utopian possibility, rendered both concrete and contingent in the novel's discourse. Her acceptance of Mattapoisset signifies both the desire for a new way of being and a sense of the agency it will take to make it.

Connie's actions link two worlds, and their interpenetration stresses the contingency of our own society - its openness to change, and the ability of utopian visions to show us its profound flaws. But it also stresses the contingency of utopia itself, its fragile dependence on active change and our willingness to make it over and over again. Thus *Woman on the Edge of Time* decisively detaches itself from teleological conceptions of history, both progressive and radical. Indeed, a profound uncertainty about historical outcomes hangs over the narrative's closing pages. By the end of the novel, Connie has found a way to stop the electrode implant experiments carried out in Bellevue, poisoning Dr Redding and his staff. The novel closes on a series of 'Excerpts from the Official History of Consuelo Camacho Ramos' (WOTET, p377) - the damning documents that follow her back to Rockover State after she has killed six people. There is no question in the narrative that Connie has contributed to a resistance against power and violence that will result in Mattapoisset, or something like it. But there is no

¹⁶Indeed, Mattapoisset's project of contacting citizens of the past has been set up for precisely this reason.

possibility that Connie herself will benefit from her “act of war” (p337), nor any guarantee that it will produce the utopian future that she now strongly desires. Whilst stressing the possibility of action on the part of the powerless, the novel also warns against the idea that power is in itself decisive, that any one’s will can be imposed on history, or that history itself can unproblematically “come out right” (WOTET, p196). As the character Sojourner observes, “No one is helpless. No one controls” (WOTET, p196). History here is nothing more and nothing less than shifting balances of power, inflected by political action and its intended and unintended consequences. There is no outright domination and no total revolution. Rather, revolutionary praxis, like utopia itself, is an act of faith. History remains an open process of struggle contingent on individual action; revolution is not inevitable. Finally, then, it is *Woman on the Edge of Time*’s insistent focus on individual and collective agency that allows it to transcend the limited ‘truths’ of both progress and pastoral to imagine sustainability in the image of desiring subjects.

Thus we can see that the critique of ideologies of technological progress in *Woman on the Edge of Time* do not lead the narrative to embrace its supposed opposite. Mattapoissett is no pastoral or Arcadia. Rather, the novel is concerned to confront teleology and linearity with notions of agency, multiplicity and open-ended possibility. Piercy’s utopia is predicated on the possibility that Mattapoissett “did not develop in a straight line” from our society (WOTET, p125). Indeed, the idea of movement either forwards or backwards along a straight line of progress is made meaningless. The framework of meaning on which they depend is revealed to be inadequate to addressing the issue of a truly sustainable culture. Science fiction technotopias have colonised pictures of the good life and the possibility of movement ‘forwards’. Yet Piercy is careful to detach the possibility of a more ‘natural’, less ‘modern’ life from the idea of a movement ‘backwards’, with all its ethnocentric western connotations. It is the development discourse within which both of these terms function that the narrative challenges, turning it upside down so that Connie finds that she has gone

“forwards, into the past”, only to find that its inhabitants try to repress their “arrogance” because they have “a more evolved society” (WOTET p125). Beyond the binary of progress and pastoral, Piercy seeks to set out a truly post-industrial future, not wistful dreams of return.

UTOPIAN REFLECTIONS: *PACIFIC EDGE*

Unlike *Woman on the Edge of Time*, *Pacific Edge* engages explicitly with the idea of utopia itself to articulate the need for new ways to think about the future. As in Moylan’s analysis of the ‘critical’ utopia, Robinson problematises the form of the literary utopia in order to explore a flexible, open and dynamic vision of sustainability. Two devices within the text do much of this reflexive work. Firstly, the naturalistic narrative of the main sections of the novel is situated and commented on in short passages by a would-be utopian writer in another time and place, Tom Barnard. Secondly, Robinson introduces, in a rather offhand and unusual way, a ‘visitor’ to his utopian community. Oscar Baldarramma is a new arrival to El Modeña, bringing with him a big-city sensibility and an endless curiosity. His letters to ‘Claire’ provide another forum for a conversation about utopia that reaches beyond its naturalistic representation within the novel. Thus the central narrative sections of *Pacific Edge*, where the ‘content’ of Robinson’s utopia is set out, do not stand alone, but are the object of dialogue and critique from two outsider figures. In the course of this conversation, the notion of utopia itself is simultaneously made into an intractable problem and contingently and partially solved. Tom’s commentary points to the limits and problems of the static blueprint utopian novel, and in doing so raises important questions about progress, history and social change and their representations. Oscar’s reflections, on the other hand, offer a second look at the texture of life in Robinson’s sustainable society, and in particular approaches of its more pastoral elements with wry urban scepticism.

However, *Pacific Edge* also confronts the problem of progress in a much more conventional way - through its plot. The narrative of *Pacific Edge* focuses on Kevin Claiborne's crusade to save Rattlesnake Hill from redevelopment. This very particular development stands for wider conflicts in the novel between the preservation of wilderness and the benefits of expansion, and in the end between Kevin's personal and empathetic deep green ethic and his opponent Alfredo Blair's rational green pragmatism. The battle over Rattlesnake Hill is formally a political one, conducted against the background of California's history of water politics and contested land use, and the novel explores the fierce intensity of this particularly fraught example of rapid economic expansion and its lasting consequences in terms of environmental exploitation. On the one hand, the 'New Federalist' party argue that the functional sustainability of El Modeña allows for limited development to serve the community's needs for civic amenities - office buildings, shops, and restaurants that will create jobs and generate income (PE, p41). Against the development, Kevin and his comrades object on aesthetic grounds to the "crowds and concrete and bright waxy greenery" of typical local malls (PE, p223), as well as arguing for the hill's actual and symbolic importance to the ecocentric ethics they feel are increasingly lacking in El Modeña's cultural and political life. The point of the political struggle over development in *Pacific Edge* is to reconfigure the social and cultural meanings of progress. The conflict derives not from the fight for sustainability as a technical or structural objective, which is more or less established in the novel's utopian society, but from a ceaseless re-examination of its meaning.

In El Modeña, the contradictory pulls of wilderness preservation and community development are represented as constant pressures, even in a society that has, in the sense implied above, 'achieved' sustainability.¹⁷ By representing these decisions and their outcomes as ongoing within the utopia, the idea of progress as monolithic and static is undermined. Sustainability is made into an open question

¹⁷The narrative in *Pacific Edge* is built on the uneasy and sometimes conflicting relationship between the structures of a sustainable society and the deep green ethic that should animate them. I will explore this issue in more depth in Chapter 6.

and, moreover, one that is resolved ambiguously. Although Kevin prevents the redevelopment of Rattlesnake Hill, the narrative makes clear that the pressures for growth and expansion have not been finally resolved. Of all the ecotopian fictions, *Pacific Edge* is perhaps the most successful in representing sustainability as a heuristic device rather than an end state, a contested concept, not just as to the detail of its management (as in Brundtland-derived discourse), but in relation to its meaning.

Utopian reflections 1: Tom

Robinson's utopia is haunted, as are all three of the narratives examined here, by a dystopia at its margins. In *Pacific Edge*, this consists in a recognisable extrapolation of our own world, and this "maddened" world slipping "from crisis to crisis...too close to the edge" (PE, p31; p257) is the context for Tom Barnard's struggle with utopianism. Robinson's focus is on the big geo-political picture as he describes a world beset by civil war, mass migration, climate change, deforestation, and the increasingly xenophobic nationalism that grows up in response - a politics of withdrawal and survival. As the main narrative of *Pacific Edge* unfolds, Tom's story (told in brief fragments) becomes clearer. Living in Switzerland with his scientist wife and young daughter, he embraces the idea of utopia as a way of thinking his way out of stalemate, of "clarifying my beliefs, my desires" (PE, p31). The utopian mode offers to make the future "seem more plausible to me" (PE, p31). It fortifies a dream, and pits imagination against ideology; thinking about Marcuse, Tom reflects that when utopia recedes out of sight, the power of ideology is almost unassailable. Utopia allows him to find a way of accounting for his own experiences of the good life in the context of the environmental decay and gross social injustice that he sees around him. Above all else, utopia for Tom is a way of reaffirming the importance of the good life, the value of human lives. Utopia, then, is "when our lives matter" (PE, p155).

But as Tom struggles to write his own literary utopia, the models he grasps for let him down. He ponders on Wells' *A Modern Utopia* lying unread in second hand bookshops; he conducts a one-sided argument with the utopian science fiction writer Samuel Delaney.¹⁸ The literary utopias he aspires to feel increasingly like a dead form,

[s]tatic, ahistorical, why should we read them? They don't speak to us, trapped in this world as we are, looking at them in the same way we look at the pretty inside of a paperweight.

(PE, p81).

Worse, they feel like a "cheat", an engineered "fresh start" that doesn't have to "deal with our history" (PE, p81). Thus Tom reprises Moylan's criticism of the classical literary utopia. As the programmatic blueprint for a fixed end or goal, it all too easily ossifies, becomes separated from the texture of human life, from the dynamics of history and, most importantly, from human agency. Switzerland's borders close and non-nationals are forced out. Tom leaves his family behind, and on his return to the US is incarcerated in an internment camp on the basis of his membership of socialist and environmental groups. More than ever, the utopia comes to seem to him like compensation, easy escapism. The withdrawal into utopian dreaming signifies a lack of engagement, and in this respect parallels Tom's despair about the existence of "pocket utopias" in the real world. In Switzerland, in his own childhood in California, for the rich before the French Revolution, a kind of limited utopia is possible. In particular, Tom's recollections of his own sunny, secure West coast childhood are bathed in a golden glow that is only partly nostalgia (PE, pp257-258). But the barbarity Tom now faces confirms over and over that these pockets of the good life, both fictional and historical, exist not despite but because of the poverty and injustice around them.

¹⁸Delaney's 'critical heterotopia', *Triton*, is included as an example of the critical utopia in Moylan's *Demand the Impossible* (1986).

Eventually, Tom rips up his notebooks and decides not to write his utopian novel. But having abandoned the literary utopia, Tom rediscovers his utopian desire, not in the grand schemes of history, but embedded in ordinary situations - again in his remembered Californian childhood, and more so in the camaraderie and support he finds in the internment camp. Here there is a refusal of despair and a depth of human kindness that intimates a better future. In regaining utopian hope, Tom also reconfigures it as the open-ended struggle of desire in relation to a living history. The utopia as system or goal slips away, reinvented in the idea of utopia as the “dynamic, tumultuous, agonizing” process of making a better world, a process “with no end” (PE, p82).

As the main body of the novel unfolds, it becomes clear that the utopian writer is also Tom Barnard, Kevin’s grandfather, one of a group of lawyer activists who instituted the legal basis of global sustainability. Although Tom’s attempt to write a literary utopia fails, his utopian desire authors *this* novel in a double sense. As Franko has observed, “Kevin’s utopia-in-process depends on Tom’s ‘utopia unwritten’” (1994, p205), and both *El Modeña* and *Pacific Edge* are the fulfilments of a writer’s longing to be the creator and narrator of a better way of being, to be able to

to sit back and write...about individual characters and their little lives because those lives really matter...writing on a hilltop in an Orange County covered with trees...chronicling how his new world was born out of the healthy fertility of the old earth mother.

(PE, p155).

The juxtaposition of Tom’s reflections with everyday life in *El Modeña* allows the narrative to intermittently shock us out of the ecotopian world and into a dystopian extrapolation of our own. The future of softball, green politics, and communal living that Kevin inhabits is shown to be contingent upon the work of Tom and others like him in creating and recreating its conditions. *Pacific Edge* embodies the processual view of utopia outlined in Tom’s earlier meditations.

The dialectic between withdrawal and engagement, escapism and activism, that Tom conducts in his meditations on the utopia are later reprised in his own life. One of the sub-plots of *Pacific Edge*'s narrative finds Tom living alone and depressed in the hills above El Modeña. The narrative traces Tom's slow journey back into the life of the town, in which context he has become, to some extent, a stranger or outsider to the world he helped to create. Tom's return creates another possibility for utopian reflection within the narrative, this time a bitter and personal one that pits the social ideal of 'the good life' against individual happiness, a theme explored throughout the novel. After the death of his wife, Tom's utopian community cannot make him happy, and during his withdrawal into corrosive cynicism, the world has changed. But it is the recognition of the inevitability of change that finally draws Tom once more into utopia through activism, as he joins the fight to save Rattlesnake Hill. Like the rearrangement of old realities, memories and selves that Tom undertakes in order to re-engage with the world, the narrative is full of turnarounds and ironies through which Robinson underlines that his is an open utopia, in which patterns have to be continuously re-thought and re-worked.

Tom Barnard is at the heart of a web of utopian reflexivity that threads through the narrative of *Pacific Edge* and beyond to connect this possible future with those articulated in the two other novels in Robinson's trilogy, *The Gold Coast*'s technological dystopia and *The Wild Shore*'s post-apocalyptic survivalist pastoral. Characters recur across these three very different imagined futures for Orange County, in dramatically different circumstances. In all three novels, the pair of 'Tom' and 'Kevin' - grandfather and grandson, embodying a dialectic between history and reinvention, withdrawal and engagement, idealism and pragmatism - are the fulcrum of the plot. Like Piercy, Robinson concretises his examination of the ideology of progress and the making of history by embedding it within

smaller and more personal questions of the relationship between generations.¹⁹ We have seen that in *Woman on the Edge of Time* Connie understands the relationship between past and future through her emotional connections with her grandparents and, especially, her daughter Angelina. In *Pacific Edge* too, the question of change within and between generations is enacted in the multi-layered relationship between Kevin and Tom. The idea of progress as the inevitable unfolding of historical forces is decentred in favour of a close-up look at the ways in which subjects act back on the history that made them in a moment-by-moment shaping of the future. This is one of the ways in which both novelists present a utopian society that is dynamic and open to change.

Utopian reflections 2: Oscar

If the figure of Tom draws our attention to *Pacific Edge*'s reflexive engagement with history and progress, the large, lumbering figure of Oscar Baldaramma contextualises the physical landscape and pastoral qualities of El Modeña's culture. Oscar is the town's newly-appointed lawyer, and one of Kevin's chief allies in the fight to save Rattlesnake Hill. But as the narrative opens, Oscar is clearly positioned as the outsider figure, able to draw attention to El Modeña's idiosyncratic culture and position it in relation to the wider world. He also fulfils the novel's occasional need for utopian exposition, explaining the basic structure of El Modeña's economy in his first letter to Claire, for example (PE, p79). Oscar constantly returns, with perplexed good humour, to the outdoor nature of El Modeñan life. In this utopia, "culture consists of a vigorous swim workout, followed by a discussion of the usefulness of hand paddles", an outlook he traces back to the idyllic climate (PE, p76). In El Modeña, he finds, everyone grows their own tomatoes (and to choose not to do so provokes a certain amount of outrage), but no-one ever goes to the theatre (PE, p32; p233).

¹⁹It is notable that as well as exploring the dynamics of progress, this device also dramatically realises the abstract conception of 'future generations' that defines the Brundtland concept of sustainable development.

On this basis, and on the grounds of its landscape and climate, Oscar describes El Modeña as “arcadian...idyllic or bucolic, depending on mood” (PE, p75). It is not, however, the pastoral of English poetry. Deep ecological values sit alongside high technologies (especially in communication and medicine) and recognisably modern sensibilities, especially in relation to individual self-realisation and a diverse range of social relationships, as in *Woman on the Edge of Time*. In other respects, however, the novel’s depiction of human beings and a calm, slow-moving community embedded almost unobtrusively in an eternal natural landscape reflects many of the pastoral’s key themes. This is evident in *Pacific Edge*’s opening lines, which evoke a panoramic view from the snow-topped San Gabriel mountains, over blue foothills, and down to the olive, avocado and lemon groves below: a picture of “a garden run riot, the dawn sun flushing the landscape every shade of green” (PE, p1). Against this landscape is the figure of Kevin, walking down a hillside trail; and the end of the novel sees Kevin restored to nature, carving his initials into a rock on his beloved Rattlesnake Hill (PE, p280). The enduring qualities of a very particular landscape, then, and a harmonious accommodation between nature and society, informs the whole of the narrative and saturates Robinson’s language, where natural metaphors abound.

Through Oscar, these pastoral tendencies are brought into explicit focus, and it is Oscar who allows us to read them not as natural or essential attributes of place, but as the outcome of social and indeed literary choices in the pursuit of the good life. The figure of Oscar allows Robinson to introduce another meta-textual level into the novel, one which positions his utopian community alongside a tradition of wilderness writing from the Pacific north-west coast of the US. The “legends and stereotypes” of this rich literary and ecocentric canon (PE, p231) provides the self-conscious interpretative frame through which Oscar apprehends his new life, and locates Robinson’s utopia in textual as well as geographical terms. It is difficult, then, to read El Modeña as a community that has emerged seamlessly out of the wild landscape of southern California; it is equally a product of the

visions of Jack London, John Muir, Robinson Jeffers, Gary Snyder and, of course, Ursula K Le Guin. The world of *Pacific Edge* is an elaborately constructed one, aware of its own antecedents and literariness. If this is pastoral, it is of the postmodern variety, refracted through Oscar's knowing discourse and assimilating disparate elements from many traditions.²⁰

Oscar's response to El Modeña is not critical so much as bemused; often admiring, but always detached. He approaches the society as an ethnologist,²¹ looking for "the locals' view of things" (PE, p231). As in all the utopian fictions discussed here, the narrative focus of *Pacific Edge*, El Modeña itself, doesn't map the whole world of the fiction. The commitment to particularity rather than universality in the critical ecotopia, the ecophilosophical insistence on cultural as well as biological diversity, means that these novels tell us always that at their margins there are other places, other ways of being; their utopian communities are one possible response to shared problems. Although Robinson describes one such other place in *Pacific Edge* - the tree village El Toro, where homes are built into a "grove of immense genetically engineered sycamores" (PE, p197) - it is in Oscar's metropolitan sensibility that their presence is really felt, and it is with Oscar that El Modeñans visit different communities, most notably a semi-urban LA that bears more resemblance to Howard's garden city than to its present metropolitan sprawl.

Oscar's awareness of both a wider world and this tradition of literary constructions of nonhuman nature confirm his quasi-outsider status within the fiction. But his reflective mediating role between the physical, outdoor culture of El Modeña and his own cosmopolitanism makes him perhaps the most recognisable character for the late twentieth reader; his cultural reference points map ours more closely than they relate to those of Kevin and his friends. He's a

²⁰Oscar also makes knowing references to Marx's "idiocy of rural life" (PE, p79), amongst other things.

²¹There are parallels here with Le Guin's 'anthropologist' figure, Pandora, in *Always Coming Home*, as we will see in the next section.

film buff, for example, but his hammy Groucho Marx impersonation sails over their heads. Oscar also takes great delight, with more than a hint of postmodern irony, in the low entertainments offered by wrestling (he fights in the guise of 'The Rhino'), drag racing (the cars are, of course, powered by grain alcohol), the annual "redneck" festival in Los Angeles, and the 'historic district' of Bishop nearby: a depthless simulacrum of everyday late 20th century life, where people can eat at a coffee shop called 'Huk Finn's' or visit an old-style auto shop (PE, p83, p94, p193). Through the figure of Oscar, then, we can both recognise our own culture, and see it made into a lifeless anachronism before our eyes, compared to the vibrant and rich everyday life represented in El Modeña.

As I have noted above, *Pacific Edge* is one of a trilogy of novels, each exploring the limits and possibilities of a classic science fiction future paradigm. They share a spatial locus, inter-textual intrusions and commentary, doubled characters and a number of themes: the relationship between human social arrangements and the environments they inherit and make, the nature of sociality, and the individual's place within both, explored through the *Bildung* of a central male protagonist. Thus *Pacific Edge* can be read as part of a larger meditation on possible, probable and desirable futures, one that engages explicitly with the discourses within which the future is conventionally thought. Its utopian society is presented as unfinished and contested, and its narrative open to intertextual conversations. The static, ahistorical blueprints of literary utopias are examined and transcended in order to foreground history as process and humans as reflexive, acting subjects.

GENRE AND HISTORY IN *ALWAYS COMING HOME*

'I never did like smartass utopians. Always so much healthier and saner and sounder and fitter and kinder and tougher and righter than me and my family and friends. People who have the answers are boring, niece. Boring, boring, boring.'

'But I have no answers and this ain't utopia, aunt!'

'The hell it ain't.'

(Pandora's conversation with the Archivist, *Always Coming Home*, p316)

The reflexive devices that contextualise the utopian societies and comment critically on utopianism in *Woman on the Edge of Time* and *Pacific Edge* sit alongside a core of naturalistic narrative, structured by a realistic plot and peopled with a stable set of recurring and relatively coherent characters. Ursula K Le Guin's *Always Coming Home* (1986) significantly departs from this format. An extensive literature attests to the unusual and experimental character of this layered, fragmentary and polyvocal piece of fiction.²² Many have drawn attention to the anthropological²³ or ethnological qualities of its attempt to 'show' texture and meaning from inside the Valley (the book's utopian community), rather than 'tell' its utopia in a conventional linear narrative. It has been described as postmodern and deconstructive, eclectic and multi-genre; a "complete overhaul" of the feminist utopia (Khanna, 1990) and a "redefinition" of the novel (Ehrlich, 2000). In a play within the book called 'Chandi', the eponymous character asks, 'How, then, shall a human live well?' (ACH, p236). Le Guin's utopia is born out of multiple and circular attempts to answer this question.

At the heart of *Always Coming Home* is a generative contradiction between the aspiration to "verisimilitude" in its representation of the life of the Kesh, and the

²²A very selective list might include, for example, Wytenbroek, 1987, Fitting, 1990, Ehrlich, 2000, Khanna, 1990, Jacobs, 1988, and José, 1991.

narrative's constant claims of its 'nowhereness' (Khanna, 1990, p132). As Khanna notes, this juxtaposition takes utopia's 'no place/good place' irony to new heights, foregrounding the critical utopia's paradox of deconstruction and invention and the dialectic between the power of utopian possibility and its practical and conceptual limits. An immediacy and density of fictional verity is packed into the text's accounts of Valley life, but their finality and integrity are disrupted by the narrative's discontinuous structure. The book is composed of a multitude of documents, stories and voices which range across genres, including plays, poetry, myth, (auto)biographical stories, recipes, and musical notation, for example.²⁴ Some items are presented as 'found' Kesh artefacts, others pose as 'factual' accounts of Kesh life. This distinction is ostensibly clarified by the division of the book into two parts, with Kesh stories and texts organised into the 'front'. The 'back' of the book supposedly comprises the "descriptive, explanatory" pieces that might otherwise interfere with the narratives of the front (ACH, 'A First Note'). However, any straightforward distinction between the two modes is subverted both by the fictional nature of the work as a whole, and by the narrator's explanation that the Kesh differentiate between the "imagined" and the "actual" in ways both more rigorous and more "gradual and messy" than our own. The difference between a "narrative that tells 'what happened'" and a "story 'like what happened'" is much less important than the intention of the teller (ACH, pp499-500). It is in the displacement of these binaries, and in the ambiguous space that it creates, that Le Guin weaves her circular, processual utopia.

²³Le Guin is the daughter of anthropologist Arthur Kroeber; her mother Theodora, also an anthropologist, wrote *Ishi* (1961), a book of myth and folklore born out of her study of Native Californian culture.

²⁴*Always Coming Home* is also elaborately illustrated with maps and line drawings, and on its original publication came with a cassette of originally composed music

Utopian reflections: Pandora

In terms of narrative structure, *Always Coming Home* is held together by a story in three parts ('Stone Telling'), and the recurring voice of the narrator, or 'Pandora'. I will return to Stone Telling's story, and its significance for Le Guin's critique of progress in *Always Coming Home*, shortly. I begin, however, by looking at how the book's reflexive consideration of the nature of utopianism is channelled through the figure of Pandora. Perhaps most importantly, Pandora offers cryptic directions on how to approach the Valley and utopia itself. She addresses the reader directly in several short passages threaded throughout *Always Coming Home*,²⁵ alluding to her authorial presence as 'finder' of Kesh life. How to find (or, more conventionally, imagine or create) the Valley is a recurring concern in the book, one also connoted by the inclusion of several near inscrutable Kesh maps designed solely for their usefulness to the people of the Valley. It reflects a radical epistemological uncertainty, especially in comparison to *Pacific Edge* and *Woman on the Edge of Time*. Pandora insists that she "doesn't want to look in the big end of the telescope and see, jewel-bright, distinct, tiny and entire, the Valley" (ACH, p53). Rather, she wants to approach the Valley "lifesize. Not at a distance, but in the hand, to be felt and heard" (ACH, p53). Le Guin's representation of Kesh life in *Always Coming Home*, therefore, values "[b]its, chunks, fragments. Pieces of the Valley... a piece of madrone wood, a piece of obsidian. A piece of blue clay." (ACH, p53).

Through Pandora, the narrative evokes and rejects the outlines of the traditional utopia, the 'view through the telescope' and its abstractions and schematics, outlines and blueprints. Instead, it favours a utopian mode that is close up and experiential, the concrete detail of a broken bowl symbolising the shards and chunks of irreducible ordinary life. At the same time, the narrative constantly

²⁵The impact of the Pandora passages is disproportionate to their small number and short length, due mainly to their acute self-reflexivity, and densely concentrated prose. It should also be noted that the presence of a distinctive narrative voice in *Always Coming Home* is not confined to the Pandora sections; it is used extensively in the 'back of the book'.

posits utopia itself as unattainable. Pandora traces a series of metaphorical moves towards the heart of the Valley, yet its location and essence remain elusive. In the last explicit Pandora section, narrator and reader approach the Valley: first seeing it at a distance, the “blue hills on the left and blue hills on the right”; going into the town, passing a Kesh woman washing in a creek; passing the Valley and finally leaving it behind. At each stage, the companion seeks the finality of arrival, exclaiming “‘That’s it, there it is!’, ‘Let’s stop, this is it!’”. And each time, Pandora insists that “we have a long way to go yet” (ACH, p339). Of all the ecotopian fictions, *Always Coming Home* offers the strongest expression of the nature of utopianism itself as asymptotic, as open-ended desire that resists the closure and reification of a final representation; for Le Guin, utopia is the journey, not the destination.²⁶

The attempt to make a utopia from the inside, rather than describe it from the outside, brings with it an attentiveness to the responsibilities of representation often lacking in the traditional utopian novel. Although her tone also ranges through sincerity and irony, Pandora’s discourse is most notably marked by worry.²⁷ As Jacobs has suggested, Pandora is both the meticulous and careful recorder of the world she has found, and the self-reflexive doubter of the critical utopian enterprise. Although she addresses the reader like a “Victorian narrator”, she has none of his certainty nor responsibility to “clarify and uplift” (Jacobs, 1988, pp41-42). In short sections throughout the novel, Pandora reflects on her role as narrator of Kesh life, articulating uncertainty about what and how to tell, about the ethics of utopianism and the problem of its representation. Like Tom

²⁶This conceptualisation of the utopia as journey also motivates Le Guin’s earlier novel, *The Dispossessed*. See José (1991) on the ways in which some of the more conventional elements of *The Dispossessed* (its single male protagonist, the ‘quest’ at its heart, and the closure and final synthesis of its ending) are subverted and made open-ended in *Always Coming Home*. The idea of utopia as asymptotic has also been applied explicitly to *Pacific Edge*, which James describes as embodying the conviction that “utopia is not a place you arrive at, it is a place you have to travel towards constantly” (1992, p126).

²⁷ Representative sections are entitled, for example, ‘Pandora Worries About What She is Doing: The Pattern’ (ACH, p53), ‘Pandora Worrying About What She Is Doing: She Addresses the Reader with Agitation’ (ACH, p147), and ‘Pandora, Worrying About What She Is Doing, Finds a Way into the Valley through the Scrub Oak’ (ACH, p239).

Barnard, she worries that utopia is impossible, or totalitarian, that it is that it is inevitably corrupted by the context of its production. She worries that utopia signifies only the degraded hope of compensation, a

mere dream dreamed in a bad time, an Up Yours to the people who ride snowmobiles, make nuclear weapons, and run prison camps by a middle-aged housewife, a critique of civilisation possible only to the civilised, an affirmation pretending to be a rejection, a glass of milk for the soul ulcered by acid rain... a cannibal dance among the savages in the ungodly garden of the farthest West.

(ACH, p316).

Read in the light of Le Guin's own critical commentaries on the lacks and limits of conventional utopian fiction (most notably in her collection of essays *Dancing at the Edge of the World*, and specifically in the short piece 'A Non-Euclidean View of California as a Cold Place to Be' therein), Pandora's uncertain voice and the fragmented, partial structure of *Always Coming Home* have been interpreted as an unusually explicit attempt to build an open and collaborative utopia (see, for example, Khanna 1990, José, 1991, and Jacobs, 1988). A continuous, coherent reading of *Always Coming Home* as a linear and finished story about 'the good life' is untenable - at the very least, as Jacobs suggests, the reader must trace her own path through the diffuse, layered organisation of pieces in the text, which firmly resists being read from beginning to end. Most critics thus interpret the book as a series of provocations and incitements to the reader to intervene and invent actively as "participants in the utopian process" (José, 1991, p188). Thus *Always Coming Home* is perhaps best read, to use a phrase that resonates throughout the text, as an invitation to "let the heart complete the pattern." (ACH, p53). This view of utopia as process (or in process) is, as José notes (1991), enacted rather than simply outlined or explained by the text. As such it undercuts the idea of utopianism as a revelatory, explanatory and primarily rational mode and reconstructs it as the free play of utopian desire in making and unmaking the shape and feel of better ways of being.

Time, history and progress

Le Guin's chief criticism of the traditional literary utopia is that it takes the form of a linear quest for "static perfection" reducible to plans, blueprints and grand structures (Le Guin, 1989, p96). In much the same way as the abstract formulae suggested by the Brundtland Report, it is born out of a rationalism both narrow and excessive. Conceived within this discourse, the utopia to which Le Guin objects is

a power trip... a monotheocracy, declared by executive decree and maintained by willpower; as its premise is progress, not process, it has no habitable present, and speaks only in the future tense.

(Le Guin, 1989, p87)

It is the linearity of 'progressive' utopian desire that Le Guin rejects most forcefully. The discourse of progress functions to spatialise the temporal, converting the future into a place to be colonised by our own expansive values. In this form, the utopia cannot truly discover other ways of being. Its blinkered, singular focus on a "one-way future consisting only of growth" (1989, p85) blinds it to the lessons of history, leaving it condemned to rewrite its own values, purified and reified, or seek an alternative in reactionary opposites. This binary logic, for Le Guin, cannot constitute the grounds for imagining a way to live. The rational utopia refuses to acknowledge the relevance of the past, and thus is doomed to carry with it the baggage of a Western history indelibly marked by precisely the geographical conquest and colonisation that is being projected into the future. This aspect of the history of discovery and progress resonates particularly strongly in relation to the geographical location of Le Guin's work; as she reminds us, "California was not empty when the Anglos came" (Le Guin, 1989, p82).

Hence Le Guin's strategy of imagining a future already inhabited. By characterising Pandora as (among other things) an "archeologist" and our contemporary (ACH, pp3-5), Le Guin finds a way of uncovering the Valley as 'past' - or, more properly, of conceiving the future as the home of an imagined people who have "always lived there" (1989, p99). She rejects the "aggressive, lineal, progressive, creative, expanding, advancing" press of history and seeks an other time and place by proceeding "roundabout or sideways" (Le Guin, 1989, p90 and p98). The Kesh exist out of time in a subjunctive mood of hope (a people who "might be going to have lived a long, long time from now" - ACH, 'A First Note'); the Valley utopia in a series of shifting, overlapping spaces.

The Cities of Mind and Man

Nonetheless, the repressions and repercussions of the linear history the novel rejects must be dealt with in order to be subverted, and to avoid a stance that is simply "reactionary" or "conservative" (Le Guin, 1989, p85). The ways in which Le Guin deals with this dilemma are complex and sometimes contradictory. Here, I will focus solely on Le Guin's creation of the semi-autonomous, self-perpetuating modes of life referred to in Kesh as '*tavkach*' and '*yaivkach*' - 'City of Man' and 'City of Mind' - which exist separately from but contiguous with the world of the Kesh. This allows her to address pressing issues of time, history and knowledge without leaving either the fiction or its imagined people in thrall to them.

In considering history and utopia, Le Guin is primarily exercised by questions of epistemology, by ways of knowing time and the world. The Kesh, as she represents them, do not consider their way of life in a linear relationship to our history and "civilization", named the 'City of Man' (ACH, p153). Other ways of life and other values are not temporalised, but treated as different modes of existence or ways of being. Since they are not concretely evident to the people of the Valley, they are treated as mythic, allegorical and sometimes spatial, but

certainly “not dates” (ACH, p153) or facts, as in the densely symbolic stories given to Pandora when she asks a local Archivist for accounts of Kesh origins (ACH, pp152-153).²⁸ The Archivist maintains that the Kesh have lived “in the Dream time” right through “Civilization” (ACH, p153). They make no distinction between “human and natural history or between objective and subjective perception” and “neither chronological nor causal sequence is considered an adequate reflection of reality” (ACH, p153). Thus the Kesh’s own existence is primarily perceived in terms of their relationship to each other and to the land, and to the continuities and reversals that this generates: a relational and ecological community known as “living inside the world” (ACH p153). Civilization, on the other hand, is what sets man [sic] ‘outside the world’ and is conceived of as an attitude or orientation, rather than denotative of a particular era. ‘Civilization’ is above all characterised as an instrumental orientation to time, a mode of “hurry” and “keeping ahead” (ACH, p410) On this plane (‘inside/outside’), the question of progress or development clearly becomes irrelevant. Daily time and ecological time structure the experience of the inhabited world. Both are conceived of in terms of what is known in the book as ‘the gyre’ - a spatial or temporal logic that proceeds through the cyclical but open channelling of energy in ways that flow evenly rather than build or accrete power. It is often contrasted with the repetitive, onward-moving motion of the wheel. Gyring time resists orientation to objects or goals, whilst preserving motion and openness to change²⁹ (ACH p25; p163-169). Thus the Valley embodies the characteristics of endurance and timelessness that Le Guin seeks for her utopia without presenting it as static or fixed. Time in the Valley is a matter of “the middle, the living, the changing” (Cummins cited in José, 1991, p190; see also ACH, p163). The narrator has given the Kesh time (a “native gift”, according to

²⁸The stories in the section of the book ‘Time and the City’, pages 154-172, called ‘A Hole in the Air’, ‘Big Man and Little Man’, ‘Beginnings’ and ‘Time in the Valley’. Most of them prominently feature the figure of Coyote, the trickster. It should also be noted that these pieces are in the Front of the book, rather than in the back where explication supposedly resides.

²⁹The spatial-temporal figure of the ‘gyre’ is closely related to the motif of the ‘heyiya-if’, a foundational element of Kesh cosmology; an illustration can be found on p . I will return to this complex, multi-layered symbol in Chapter 6.

Pandora), which necessitates their removal from history and a reversal of valuation such that history becomes 'outside' and timelessness 'inside' the world.

However, the wider 'community' of Le Guin's utopia, and indeed the book itself, do have a place in which dates and "linear chronology" are dealt with. This is *yaivkach*, the 'City of Mind'. In *Always Coming Home*, the people who populate the Valley share it (in a pattern repeated all over the planet) with another entity, composed of "independent, self-contained, self-regulating communities of cybernetic devices or beings - computers with mechanical extensions" (ACH, p149). The essence of this network is, apparently, nothing more or less than information itself, its collection, storage, and collation; its purpose that of "any species of individual; to go on existing" (ACH, p 149). It has a physical presence and is available for human use through the "Exchanges" or computer terminals available to any settled group (ACH, p150). It functions for communities mainly as a "source of useful information" - "weather forecasts, warnings of natural disasters, train schedules...medical information, technical instructions..." (ACH, p151), and is treated with disinterest bordering on disdain. Thus, Le Guin integrates high-powered communication technologies and rational-instrumental knowledge, accessible to anyone who cares to learn TOK (the utopia's Esperanto), into her utopian world, without also smuggling in its associated ideologies. At issue here, the book suggests, is not information itself, but its uses (see also Le Guin, 1989). The epistemological mode of the Kesh is best apprehended through the centrality of giving to their cosmology. Freedom and self-realisation are founded in the material and philosophical act of "unhoarding" (ACH, p314); the circular, transitive act of giving is conscious ("mindful" in the language of the Valley), involving "a great deal of discrimination; as a business it requires a more disciplined intelligence than keeping, perhaps" (the Archivist, ACH,pp314-315). The City, on the other hand, "keeps"; it accumulates disembodied and free-floating data and 'keeps' linear time, and its freedom is "our freedom reversed" (the Archivist, ACH, p152).

Thus the City of Mind exists outside human instrumental values in relation to the use of knowledge in the Valley, and operates metaphorically and metatextually to situate the book in relation to history, epistemology and politics, elaborating on the text's uncomfortable relationship with its generic and ideological context. The conceptual schism or separation between the book's human community and informational network is "necessary and significant" to its portrayal of a people living 'inside the world' (ACH, p153). The two 'species' (human and informational) have "diverged to the extent that competition between them was nonexistent, cooperation limited, and the question of superiority and inferiority bootless" (ACH, p152). Like forests, anthills and stars, the City of Mind is simply another of the innumerable kinds of being in the world, an aspect of an organic whole, but not instrumentally important. History and 'Euclidean' forms of knowledge are annexed into into a separate and self-directed entity, which accounts for their complete absence from Kesh daily life. The City monitors and records everything on earth and beyond that is amenable to monitoring and recording. Its unique mode is super-rational and quantitative, embodying "perfect nonmanipulative objectivity" (ACH, p151). In contrast, the mode of the Kesh appears all the more sharply as qualitative and experiential, a mode that resists accumulation in all its forms, psychological, cultural and material - a mode that not only resists economic 'progress', but has no epistemological grounds on which even to entertain the concept.

Stone Telling's story

It is these extensive reflections on how history inflects the very process of "finding" or creating a utopia, in particular the ways in which time is 'spatialised' in hegemonic discourses about the future (so that it might be colonised by progress), that prevents *Always Coming Home* from falling into the conservative pastoralism that Kumar decries in 'Primitivism in the Feminist Utopia' (1981). The book has, however, been accused of exactly this. Fitting, for example, sees in the "idyllic" future Valley something rather too close to the "pastoral" (1990,

p153), characterising Le Guin's utopia as "a nostalgic return to an almost pretechnological world" (Fitting, 1990, p153). The novel as a whole fails to engage with strategies for change, the "conflicts, disagreements and hardships involved in building a new society".³⁰ Instead, according to Fitting, it focuses entirely on the "pleasures and joys" of an everyday life that has no relationship with the "conflicts and contradictions of our own", which have not been "negotiated or resolved so much as simply whisked away" (1990, p153). On this reading, *Always Coming Home* cannot be included in Raymond Williams' of utopia proper, which must incorporate the idea of willed transformation (Fitting, 1990, p154; Williams, 1997).

Indubitably, the Kesh way of life incorporates features associated with both the literary Arcadia and deep ecological visions of an unproblematic identification between society and nature. It presents a self-consciously simple society almost entirely devoid of technology, a cyclical rather than linear rhythm of life, small, decentralised communities embedded both physically and culturally in their surrounding landscapes, and stable and enduring social relationships. However, Fitting underestimates the complex ways in which Le Guin situates her utopian community with respect to time and History, outlined above, as well as to our own present moment. Her strategies are not the straightforward and explicitly politicised commentaries on history, change and agency elaborated by Piercy and Robinson; they are elusive, figurative and symbolic. Fitting argues that these qualities are precisely the problem. Without a "logical exposition" of the advantages of its utopian society, it fails to convince. In particular, Fitting argues that 'Stone Telling', the story of a Valley woman's confrontation with the darkly imperialist, patriarchal and monotheistic Condor people, fails to counter Le Guin's Arcadian escapism (Fitting, 1990). However, this reading systematically underestimates both the narrative and figurative power of Le Guin's allegory. Although 'Stone Telling's' three sections constitute "just over 100 pages of a

³⁰ It might be argued that Le Guin represents more than enough of those hardships and disagreements in *The Dispossessed* (1975) to last any author a lifetime.

525-page book” (Fitting, 1990, p151), it is the one consistent narrative thread running through the ‘Front’ of *Always Coming Home*, and its recognisably coherent linear narrative contrasts starkly with the plural, fragmented nature of the text as a whole.³¹ As such, it carries significant weight within the text, enacting a direct opposition between the values of living inside and outside the world, between the linear/unitary and the cyclical/heterogeneous. In short, this is a pivotal or “hinge” episode in the book;³² the intrusion of the City of Man into the Kesh’s world stages a conflict between progress and process which resonates throughout the whole novel.

Stone Telling (called ‘North Owl’ as the story opens) lives in a Valley village, Sinshan, with her mother and grandmother (Kesh families tend to be matriarchal). Her growth into adolescence is a difficult one, compounded by problems within her family and her conflicted identity as “Hwikma” - “half-House”. Her father is not Kesh but one of the warrior Dayao (‘Condor’) people who as Stone Telling’s story progresses are beginning to claim land around the Valley to bridge the local river. Eventually Stone Telling accompanies her father, Abhao, to their city. Here, she becomes ‘hontik’, the Condor designation for “women, foreigners and animals” (ACH, p193) - a non-person who must live segregated with the women, deprived of books and writing. Later, she escapes from the City and makes her slow way back to the Valley, where she re-establishes her life.

The Condor are shadowy and terse figures, their masks emphasising their metaphorical status within the book. They embody the values of a monotheistic, hierarchical, élitist society, predicated on ultimate obeisance to the One and his earthy representatives, the élite True Condor caste. They seek to conquer and

³¹ José (1991) also warns against reading Stone Telling’s story as the dominant frame of the book, a reading which would both understate the heterogeneity and multiplicity of the text and overstate the continuity and cohesion between the three parts of her story, told at three radically disjointed stages of her life and under three different names.

³²It is an example of a particular form of Kesh cultural expression - the life-story. And as the narrator explains, the idea of the ‘hinge’ here represents “an intersection of private, individual historical lived-time with communal, impersonal, cyclical being-time”. Thus Stone Telling’s story speaks to myth and ideology.

overcome; to occupy territory, to build, to expand and accumulate. They don't, like the Kesh, 'give back'. Their way is "straight, single, terrible", without the twists, cycles and "reversals" of the Valley (ACH, p201). They subject their people - the 'tyon' (peasants') and hontik (non-persons) - to abject poverty, and "impoverish the planet's substance forever" (ACH, p380) in order to construct weapons of war, (ab)using information from the City of Mind. The Condor are not simply corrupt; their way is corrupting. As the Condor aggressions begin, the Valley's all-male 'Warrior' lodges prepare to respond in kind, locked in a sterile binary (a response eventually dissipated as the Condor overstretch themselves and implode aided by peaceful non-cooperation from across the Valley and beyond).³³ Stone Telling herself is presented as a liminal figure in the text; through her we see both the attraction and the fatal power of the Dayao. Her story is atypical, an aberration, and Stone Telling is a mediator who reaches out from the amorphous web of Valley life to illuminate its holism and its mindfulness, to bring it home to us. It functions as a recognisable strategy of the critical utopia to objectify or reframe the values that construct our own present. The myths of living outside the world in *Always Coming Home* make symbolic enactments of the need to renew and rebuild utopia as a conscious, open-ended process.

Of the three utopias considered here, the 'content' of Le Guin's utopian society as it emerges through the fragments appears to conform the most closely to Arcadian patterns, with its self-consciously simple society and close, unquestioned harmony between humanity and nonhuman nature. The pastoral, however, is primarily a stylistic or discursive device, and the heterogeneous, multiple structures and modes of telling that constitute *Always Coming Home* make the simple unities and homologies of the pastoral mode unavailable to the reader at the level of form. The pastoral is defined as much in terms of the social and historical context that it excludes - its specific place in time and the legitimation of hierarchical social relations that invisibly inform its narrative about nature - as

³³Similarly, the oppressed and degraded women in the Condor city (banned from writing and sacred places, and taught only household skills) collude in the system and fiercely uphold their segregation. They are "kept in, but left out" (ACH, p200).

in relation to any essential features or qualities of the life it evokes. That context is insistently present in the twists and turns of *Always Coming Home* - in the conceptual excursions around the Cities of Mind and Man, in the allegory of the Condor people, and meta-textually in the hesitant voice of Pandora, who takes pains to ask rhetorically:

Am I not a daughter of the people who enslaved and extirpated the peoples of three continents? Am I not a sister of Adolf Hitler and Anne Frank? Am I not a citizen of the state that fought the first nuclear war? Have I not eaten, drunk, and breathed poison all my life, like the maggot that lives and breeds in shit?
(ACH, pp147-148).

The shadow of environmental crisis hangs over the novel, although the Kesh only stumble into it, as the 'origin' story "A Hole in the Air" (ACH, p154) demonstrates. It tells of a man who falls into the City of Man, where he finds the air "thick and yellow", the food poisoned, a road "coated with grease and feathers" and the people "continually making war" (ACH, pp155-156).³⁴ As in *Woman on the Edge of Time* and *Pacific Edge*, Le Guin's utopia confronts its own time, and its own ideological questions.

These reflexive devices situate the recursive character of the text, underlining what it means to be 'always coming home'. Explorations of better ways of living in other possible futures, always bring us back to here and now. But the time and space we return to is reconfigured by these cyclical movements, marked by the knowledge of other ways of being. Thus Le Guin's utopianism evades the static pastoral bubble (in the future as in the past) and also subverts the linear conceptions of time associated with 'progress'. It finds a way of exploring a

³⁴This story closely parallels episodes in *Woman on the Edge of Time*, both Connie's time-slip into Gildina's world (discussed above), and Luciente's visits to Connie's time. A sense of visceral, sensory repulsion permeates the accounts in both novels, highlighting the persuasiveness of 'outsider' accounts of aspects of contemporary reality, as 'critical' approaches to the utopia have argued (see Chapter 4).

sufficient society that is both outside an overdetermined history and contiguous with the space of everyday life. The novel's imaginative actualisation of the institutions and values of an ecocentric worldview will be explored, alongside those of *Pacific Edge* and *Woman on the Edge of Time*, in the next chapter.

CHAPTER 6

Ecotopia

INTRODUCTION

This chapter explores the diverse ways in which the green utopias of Piercy, Robinson and Le Guin dramatise the emancipatory ecocentric claim that living in accordance with deep green principles promises an expansion and reconstruction of human well-being. In Chapter 5, I argued that these green fictions reflect a new ambiguity in the field of utopian desire. As we saw, their attempts to imagine sustainability are complicated (and ultimately enriched) by a dissatisfaction with both the genre constraints of traditional utopian literature and the broader cultural discourses within which the future is habitually constructed - hence the narrative tropes and strategies that I have called 'reflexive' or, after Moylan (1986), 'critical'. My analysis of those strategies focused on the critical ecotopia's rethinking of the very idea of 'the future', and their attempt to dislocate it from the taken-for-granted models of apocalypse, pastoral and progress. In a sense, these reflexive strategies try to make a new starting place for the imagination of sustainability. They suggest that if we want to imagine a truly ecological society, we had better not start from here. In deconstructing the dominant future paradigm of 'progress' and its instrumental, technocratic and materialist baggage, and rejecting the conservative lure of escape into an imagined pastoral past, these narratives offer the possibility of creating the future from a new ideological standpoint. They clear a space for the elaboration of ecocentric philosophy into whole ways of life. This chapter examines what fills that space: a utopian picture of the good life for human subjects which not only respects ecological integrity, but in which a closer and more equal relationship with nature is a vital component of human well-being.

I argued in Chapter 4 that the utopia was better read heuristically than prescriptively, that is, as a way of exploring meaning, values and desire rather than as an institutional blueprint. The critical utopia makes the heuristic reading the preferred or dominant one by foregrounding the constraints and rigidities (both formal and political) of the systematic utopia or 'perfect moral commonwealth'. This should not imply, however, that the idea of social structure simply disappears in the critical utopia. On the contrary, compelling pictures of the structures and institutions that might support a better way of living in a new relationship with nonhuman nature are vividly present in all three texts. Of all the novels, Le Guin's *Always Coming Home* most forcefully resists the tyranny of system, both in its ideological opposition to rational schematics and in its fragmented, ostensibly inchoate structure. Yet even here a stable pattern of social organisation is easily discernible, and a structural motif inspired by transpersonal ecocentric ethics (the 'heyiya-if') shapes Kesh cosmology, social interaction and physical settlements. Piercy's *Woman on the Edge of Time*, in some ways the most conventionally utopian of these ecological narratives, retains the 'visitor-guide' trope, enabling both Connie and the reader to take a tour through the social institutions of a community modelled on a feminist variant of social ecology. *Pacific Edge*, different again, foregrounds the consciousness and *Bildung* of a single protagonist, making extensive use of the conventions and tropes of the naturalistic novel. Nonetheless, Kevin's intense and critical engagement with the socio-political institutions of his society, explored through the Rattlesnake Hill plot, reveals their principles and dynamics. This unusual combination of utopian setting and realist narrative enables Robinson to present both the structures of a (technocentrically) sustainable society and a glimpse of the porous ecocentric consciousness suggested by transpersonal ecological philosophy.

Thus the description of patterns of social organisation remains key to the 'manifesto of otherness' at the heart of explicitly utopian fiction, even in the critical form. Their ecotopian visions are incomprehensible without reference to the structures that shape and support their philosophy. However, a 'structural'

approach to the ecotopia is only one part of the story. The novels' ecocentric worldviews and values are not reducible to political, economic and social institutions. A full exploration of the fictional green utopia demands attention to how those institutions are animated by cultural beliefs and social action, by individual subjects and interrelationships both human and nonhuman, and by change and fallibility as well as stability and continuity. Viewed in this way, the mappings between the characteristics of the reflexive or heuristic utopia and emancipatory ecocentric approaches to sustainability can be clearly seen. The utopian impulse in both discourses is constructed as a question of meaning and desire rather than a matter of system or schema. Both envisage radical change in the direction of sustainability at the level of culture and subjectivity rather than institutional reform or the playing out of executive decisions. Paradoxically, however, ecocentric theory all too often reduces its own utopian visions of a sustainable or sufficient society to rigid blueprints and structures (see Chapter 3), imposing a premature closure on the concept in the name of a singular and absolute ideal rather than pursuing the open-ended and heterogeneous "fresh inquiry into the meaning of the good life" advocated by Sachs (1999, p186). Critical ecotopian fiction, on the other hand, embodies exactly this spirit of inquiry, rendered in richly descriptive narrative pictures rather than prescriptive blueprints and abstract rhetoric. Thus analysis of the literary ecotopia's contribution to sustainability debates also requires attention to *how* the imagined world is represented, how narrative is used to explore the idea of sustainability in experiential as well as cognitive terms.

In this chapter I outline the main patterns of social organisation in Robinson's *El Modeña*, Piercy's *Mattapoissett*, and Le Guin's *Valley*. As in Chapter 3, these are divided for analytic clarity into the three categories of the 'steady-state' or no-growth economy, the issue of political autonomy and decentralisation, and the idea that communities should be 're-embedded' in their local ecosystems. However, rather than attempting to systematically describe the 'content' of a sustainable way of life in terms of the structures and institutions represented in

the novels, I will take a more holistic approach. An analysis that separates structures from values and both from the specific ways in which the narrative handles its utopian themes risks dismantling the novels' unique discursive approach and failing to convey their distinctive contribution to sustainability debates. Instead, I will treat each of the three principles of radical visions of sustainability as themes rather than blueprints, attempting to show how an understanding of the texts involves treating their vision of a better way of living and being, the institutions that can support it, and its narrative representation as inseparable.

STRUCTURES OF SUSTAINABILITY: THE STEADY-STATE

In Chapter 3 I explored how deep green advocacy of the limits to growth thesis and the principle of minimal ecological impact commits it to a steady-state or no-growth economy. Ecocentric approaches maintain that a truly sustainable lifestyle would be one modelled on scarcity or sufficiency. For ecocentric philosophy, sustainability doesn't simply mean 'cleaner' and less wasteful and depleting economic growth; it involves a radical scaling down of production, consumption and exchange in line with the deep green aim to embrace a life that is 'simple in means, rich in ends'. Emancipatory ecocentric proposals for a sufficient society are built on an end to mass industrial production, consumerism and commodity fetishism, and a return to local self-sufficiency, small-scale 'craft' production and the reduction and simplification of human material needs. A commitment to similar principles is frequently voiced in all three utopian novels. In *Pacific Edge*, Kevin articulates the view that "[m]ore isn't better, that's the point. Orange County is perfect proof of that" (PE, p230); in *Woman on the Edge of Time* Connie observes that the people of Mattapoissett "don't seem to believe really in *more* - not more people, more things, or even more money" (WOTET, p328); and in *Always Coming Home* wealth consists "not in *things* but in an *act*: the act of giving" (ACH, p112; italics in original). In Chapter 4 I explored the novels' rejection of ideologies of material progress. Here, we will look at the

wide variation of ways in which they imagine an alternative, sustainable economic system.

Of the three, *Pacific Edge* paints perhaps the most straightforward picture of a 'steady-state' economy, in which equitable distribution is prioritised over productive expansion and limits to material growth are tightly circumscribed. The sustainable society envisaged by Robinson features a mix of private and municipal enterprise. Global corporations have been broken up into small businesses that are firmly rooted in their communities, their maximum size regulated by international legislation (PE, p121). Some form of capitalist infrastructure still exists (see PE, p244, for example), but on a small scale, stringently controlled and extensively combined with various models of worker ownership. Perhaps most importantly, business itself is seen as political and emplaced, with a considerable and very visible responsibility to the community that supports it. The legal limits on company size militate against growth for its own sake and restructure the possibilities of the pursuit of profit.

El Modeña mixes local communalism with what is known as the 'new Federalist model'. Communalism here refers to public ownership of land and utilities, the expectation that all citizens undertake a certain amount of 'town work', and the operation of some town-owned businesses to soak up all available labour (PE, p79). 'New Federalism' denotes a model based on highly progressive taxation. All residents and privately or cooperatively owned businesses are subject to a heavily graduated tax, the proceeds of which provide both a basic income for all citizens and fund local welfare services. Local economies like El Modeña operate within the framework of global legislation that guarantees the basic income scheme (or 'town shares'), and sets national 'floor' and 'cap' levels. A minimum standard of living is thus ensured, whilst moves to expand the local economy are rigorously curtailed. By these standards, El Modeña and its citizens are comfortable but not enormously wealthy. There is room for expansion within the legal limits, as is seen when Alfredo Blair attempts to persuade the town to adopt

his development scheme on Rattlesnake Hill. Some neighbouring towns and communities in Orange County choose to work nearer the legal income ceiling, where the “stakes are higher” (PE, p120). However, the decision to increase the pot of ‘town shares’ is a political one that must be lobbied for and agreed locally.

In *Woman on the Edge of Time*, by contrast, no trace of capitalism remains - “we don’t buy or sell anything”, Luciente tells Connie (WOTET, p64). Private profit and ownership are eschewed on the grounds that they are in principle unsustainable, and in practice ecologically and socially destructive. Instead, an ecologically informed anarcho-communalism dominates. The steady-state economy of Piercy’s world is guaranteed by local self-reliance rather than international legal structures, and supports no commodity production. No-one owns anything in Mattapoissett; production is for ‘need’ and decided democratically and locally. The decentralised communities that Piercy imagines comprising the region of ‘Mouth-of-Mattapoissett’ trade between themselves, and with other regions,¹ but each community aims to provide for itself, or at least to be “nearly self-sufficient in proteins” (WOTET, p115). At base this is an agricultural economy, or, as Connie observes, in many respects Mattapoissett is a “peasant” society. Land is held in common and farming is the responsibility of all the town’s citizens. Low-impact but intensely cultivated farmland combines with vegetable plots and small-holdings (often overrun with goats and chickens) to provide for the basic food needs of the small village. In the areas controlled by the new utopians, this pattern is repeated across the globe.

A similarly small-scale, no-growth economic structure exists for the Kesh in *Always Coming Home*, where relative self-reliance appears to operate at the level of the household as well as the village. Here too agriculture is the central economic activity. Surpluses from land held in common, including staples like beans and wheat, are kept in village storehouses, and are freely available to all.

¹“Mouth-of-Mattapoissett exports protein in flounder, herring, alewives, turtles, geese, ducks, our own blue cheese. We’re the plant-breeding centre for this whole sector in squash, cucumbers, beans and corn.” (WOTET, p128).

But each family also has its own farm or smallholding, which range from messy patches at the back of the house to shares of the town's wild olive groves, gathering trees, and vegetable fields worked by members of extended families (ACH, p24). The Valley is well-known for its "great vineyards" and wine is traded with other regions. In return, the Kesh import some staple foods and other materials, most importantly cotton. Trade is carried out through a barter system; as in Piercy's *Mattapoissett*, there is no production for profit or monetary economy in Le Guin's Valley. A household with seven cooking pots might be considered rich (as Stone Telling discovers when she leaves her village Sinshan to visit cousins in more prosperous Telinas; ACH p12). Real wealth, however, consists in the "act of giving", not in accumulation. Although individuals and families in the Valley 'own' what they make or gain, they in turn belong to their community (human and nonhuman) and their place. In a society that measures time and creates meaning in flows and cycles, keeping and expanding (both linear processes) cannot be a way to live well. As the Kesh have it, "owning is owing, having is hoarding" (ACH, p313).

In all three novels, mass production and its techno-industrial infrastructure has disappeared. This is less marked in *Pacific Edge* where although there is no reference to industrial production (or resource use), it is never explicitly ruled out. Moreover, advanced technologies play an important part in the novel. Kevin is a 'bio-architect', implanting a "nervous system" of sensors into houses which feed information into a computer that controls temperature and ensures energy efficiency (PE, p108). Kevin's political and romantic rival Alfredo Blair runs a successful biotechnology company, Heartech, producing artificial heart valves. The narrative is also sanguine about genetic modification of crops, a trait shared by *Woman on the Edge of Time*. For the most part, technologies in the novel are carefully presented as 'soft', ecologically sensitive, or socially necessary - the energy efficiency devices in Kevin's houses, the life-saving benefits of Heartech's products, the superconductors and new alloys developed by Kevin's friend Doris. Nonetheless, an unwillingness to explore the material base of the

imagined society in any detail and to consider how technology mediates nature-society relationships, leaves Robinson's conception of sustainability somewhat ambiguous in this respect, in stark contrast to both Piercy's and Le Guin's utopias.

In *Woman on the Edge of Time* and *Always Coming Home*, the what and how of the society's productive based are systematically thematised. Both utopias make room for some mechanised, even automated production. In Mattapoissett, small self-regulating factories make "jizers" (duvets and 'comforters'), and there are dishwashers in the communal 'fooder', for example. Automation also allows the operation of the 'brooder', Piercy's invented technology for extrauterine conception, a kind of artificial womb. Likewise, as we saw in Chapter 5, in *Always Coming Home* there is 'yaivkach', the community of cybernetic devices with mechanical extensions spanning the globe. But technology and production in the two texts are always situated and tightly circumscribed by three tenets of ecocentric economics: energy efficiency, strict limits on the use of natural resources and the production of waste and pollution, and the precautionary principle. In *Woman on the Edge of Time*, these principles are explicitly politicised, and frequently reiterated to Connie as she finds her way around this strange new society. Energy supplies are 'fixed' - "so much from the sun, so much from the wind, so much from decomposing wastes, so much from the waves..." Luciente ticked them off on her fingers (WOTET, p129). Nothing can be simply discarded - "[t]hrown away where? The earth is round" (WOTET, p240). In the 'Age of Greed and Waste', Luciente tells Connie, we used up "a confounded lot of resources. Scarce materials. Energy". Now, they "have to account" and "can afford to waste nothing" (WOTET, p278; p125). The citizens of Mattapoissett reject linear conceptions of cause and effect in favour of a holistic conception of science. The world is a living, interconnected web in which the 'effects' of human intervention are likely to be widespread, multiple, and unpredictable. Human instrumental concerns, therefore, must be subordinated to the bigger ecological picture. Thus Mattapoissettans are "cautious about gross

experiments” (WOTET, p97) and build a quite surprising degree of ontological insecurity into everyday social practice; under conditions of uncertain knowledge, one can never feel “yin-and-yang sure about anything” (WOTET, p115). Production itself, as well as science and technology, is thoroughly politicised. *Woman on the Edge of Time* self-consciously presents its utopia as post-industrial, the outcome of a revolutionary dismantling of the ‘military-industrial complex’ and an earth poisoned by “chemicals, nitrites, hormone residues, DDT, and hydrocarbons” (WOTET, p55).

In *Always Coming Home*, on the other hand, the tenor of everyday life in the Valley has more in common with a pre-industrial pastoral.² Ecocentric principles are portrayed as being so firmly embedded into social and economic institutions and practice that they are rarely commented upon.³ It is typical of both Le Guin’s picture of the Kesh and her ‘sideways’, phenomenological approach to utopia that key elements of economic organisation - the system of agricultural production, local self-sufficiency, how trade is organised, etc - are elliptically introduced from the bottom up. Rather than describing institutions, Le Guin leaves them to be inferred from concrete patterns of life, as in the self-explanatory sections called ‘What they Wore in the Valley’ and ‘What they Ate’ (which includes a number of recipes and a treatise on Kesh table manners), and through the strange, attenuated story ‘The Trouble with the Cotton People’ which focuses largely on the complex and long-distance interpersonal and economic relationships needed to maintain trade (ACH pp434-436; pp437-443; pp136-146). However, it is clear that the stable ebb and flow of Kesh social life militates against material expansion and the development of destructive technologies. Sophisticated technologies and “big power looms” are used in spinning and weaving, which take place in “the town workshop” (ACH, p436) under the overall aegis of ‘the Cloth Art’, one of a number of specialist guilds for all the crafts and professions of the Valley. These include, *inter alia*, the Tanning Art and Glass Art, the Wine Art and Book Art, the

²Although see Chapter 5 for a discussion of how this is undermined elsewhere in the text.

³Symbolically, of course, this issue is addressed through the Valley’s encounter with the Condor people.

Doctors Lodge and the Planting Lodge (ACH, pp46-47). They train new practitioners, drawing productive work firmly into social networks and personalising production. These forms of production suggest both pre-industrial craft guilds and the 'convivial', human-scale, mode of production favoured by theorists like Illich. The Arts and Lodges provide the tools (both 'technological' and cultural) that allow the individual to "invest the world with his [sic] meaning [and] to enrich the environment with the fruit of his or her vision" (Illich, 1973, pp20-21) rather than instrumentally exploit an externalised nature. The Miller's Art, responsible for "watermills, windmills, generators...engineering, and the construction, operation and maintenance of machines" is especially marked as a problematic one. Those in it are "dangerously attractive" people, involved in potentially transgressive work which exists "on the threshold" between living 'inside' and outside' the world (see Chapter 5). Thus the Miller's Art is carefully watched and its legitimate activities closely demarcated (ACH, p48; see also p96 and p294).

As the Kesh case suggests, changes in the productive sphere radically alter the nature and meaning of work for the novels' utopian inhabitants. As we might expect in non-capitalist societies, work is less privatised and more communal. In the largely agrarian societies of the Valley and Mattapoisett, everyone from the smallest child to the oldest citizen is involved for some part of the day or the year in agricultural work, especially at busy times, like "spring planting, at harvest...or when some crisis strikes" (WOTET, p128). Similarly, a good part of the everyday running of towns and villages is socialised. In *Pacific Edge*, this is formalised into a fixed number of hours to be spent improving and maintaining the town's infrastructure; indeed, as the novel opens we find Kevin and a group of friends taking apart the concrete and asphalt, traffic lights and power cables, that supported a long-gone car-driven society (PE, p18). Such work is suffered patiently and "best regarded as a party" (PE, p2). A rota system likewise involves most adults in a share of childcare. In Mattapoisett, the system is much more informal, and largely arises out of the socialisation of most domestic tasks.

Meals, for example, are taken in the communal 'fooder', where people take turns in cooking and clearing up, and it is everyone's duty to "care for the brooder [and] for animals" (WOTET, p128). In *Always Coming Home*, domestic arrangements are perhaps the most familiar, and a matriarchal family structure prevails. Here, the line between 'work' and domestic life is markedly blurred, not least because of the predominantly agrarian economy so that every household is also a farm or smallholding.

Over and above this 'necessary' labour, however, there is room for the development of individual talents and vocations in all three utopian societies, which support a fairly varied mix of occupations. *Pacific Edge* offers the most familiar range of jobs and professions, perhaps because its society retains some broad structures of capitalist modernity, allowing for recognisable kinds of specialism and division of labour. Kevin, as noted above, is an architect, his friend Oscar a lawyer (the legalistic structure of Robinson's post-industrial world supports plenty); their circle also includes a high school teacher, a biotechnologist, a chemist, a botanist and a computer technician. Although there is no paid labour in Mattapoissett, there is plenty of work; as in *Always Coming Home*, work is used to construct a picture of diversity within the utopian community, emphasising the development of individual skills, talents and vocations. Of the main characters in *Woman on the Edge of Time*, Luciente is a plant geneticist, Bee a (very odd) kind of obstetrician working at the brooder, and Jackrabbit is a holographic artist. In both novels, familiar occupations are juxtaposed against ones carefully invented to suggest a flavour of what are considered important tasks in these communities. In *Woman on the Edge of Time*, the emphasis is on ecology, psychological well-being, and the fostering of community through the arts. Training is slow and thorough, usually undertaken one-to-one with a mentor and is strongly internalised as integral to full subjecthood or identity. This contrasts strongly with Connie's experience in her 'real life', where work is always directly or indirectly exploitative. In Mattapoissett, meaningful, autonomous work contributes to both sustainability and

self-realisation. There is no hierarchy in work; each occupation is accorded equal value and respect in terms of the different things it contributes to social well-being. Similarly in *Always Coming Home*, all work is a focus for pride, making a strong contrast with the Condor people's "crazy" connections between work and status. To Stone Telling's Dayao father, one who digs dirt is a *tyon*, the lowest of the low; to Stone Telling he is simply "a farmer", as is everyone (ACH, p32).

To a greater or lesser extent, the sustainable, no-growth economies of Piercy's, Robinson's and Le Guin's utopias are enabled by radically reduced population levels. Only *Always Coming Home* addresses this contentious question directly. One of Pandora's chief worries is that she has "killed all the babies" to make a population level capable of carrying sustainability and give the Kesh "room" to live (ACH, p148):

You may notice that the real difference between us and the Valley, the big difference, is quite a small thing, really. *There are not too many of them.*"

(ACH, p147; italics in original)

In contrast, the sparsely populated countryside in *Woman on the Edge of Time* (Mattapoissett has a population of around 600) goes unremarked, and Robinson rather side-steps the question by setting his narrative in the small community of El Modeña and only briefly visiting the more densely urban city of Los Angeles. To an extent, the transformation of reproduction in *Woman on the Edge of Time* implies that population reduction has been effected humanely and ethically. In Piercy's feminist ecotopia, reproduction is carried out by 'artificial' means, placing the onus on adults to make an active decision to parent only when they feel ready for such a commitment (a decision, moreover, that is overseen by the whole community). Many choose not to mother, or do so only once. Since co-mothering is undertaken in groups of three, it seems clear that population is likely

to decrease and at an increasing rate.⁴ However, the issue of population levels remains a structuring absence in all three texts (although Le Guin raises the question, no answer is forthcoming). Here, the hypothetical, imaginative and experiential discourse particular to fiction allows it to evade key issues in what Moylan calls the text's "iconic"⁵ register, issues which nonetheless intrude into its "ideological" one, and which cannot be ignored in the realms of applied ethics and practical politics.

The question of 'want' and 'need', on the other hand, can be handled quite fruitfully through speculative narrative. As I suggested in Chapter 4, there is a sense in which the contingent, concrete and experiential terms of narrative lend themselves better to an exploration of this issue than the abstract and cognitive arguments of political philosophy. Clearly, the utopian quest to discover 'what it means to live well' embraces the question of what material things are necessary or desirable for 'the good life'.⁶ The ecotopian novels' pictures of a steady-state economy, their radical paring away of the 'excesses' of consumer capitalism, involve an investigation of the ecocentric idea of 'sufficiency'. How much, they ask, is enough? Radical ecological principles propose a culture of "intelligent self-limitation" (Sachs, 1999) or 'voluntary simplicity'; its critics accuse it of advocating a pious and unnecessarily ascetic lifestyle. What do the citizens of utopia have, and what do they desire?

I have argued that in emancipatory ecocentrism the reduction of the pleasures and satisfactions entailed by curtailing consumption are offset or compensated for by the possibilities of an expanded scope for human self-realisation in other

⁴On the other hand, parenting becomes a realistic possibility across almost the whole lifespan for all men and women; in principle, one could mother several times. The technology itself is no guarantee of population reduction, only its complex social context and consequences.

⁵The 'iconic' register being the "fabric of images" that constitute the novel's picture of an alternative society. The 'ideological' register, by contrast, denotes the "contestations" in the text that situate it historically and politically (Moylan, 1986, p36).

⁶For a fuller discussion of this issue, see for example Levitas (1984) 'Need, Nature and Nowhere', and, from an ecological perspective, Leiss, 1988 and Dobson 1995 Chapter 3. Of course, for some theorists the question of need and want and the scope of utopianism are co-terminous - see for example Davis (1981).

spheres, most notably in relation to interpersonal relationships. This new idea of a better way of being is explored in detail in the ecotopian novels. Instead of material possessions, their utopian citizens have more time, more space, and richer relationships, both interpersonally and with nonhuman nature. Self-development is a central theme in both *Woman on the Edge of Time* and *Always Coming Home*, where rites of passage mark key moments on the way to “becoming a person” At some stage in their lives most of the Kesh undertake a “solitary spiritual excursion”, usually in the form of a pilgrimage to ‘Grandmother Mountain’, a “centrally sacred” place for the Kesh (ACH, p41). ‘Walking on the mountain’ is a pivotal moment in Stone Telling’s emotional and psychological journey, for example, and in her own self-narrative it marks the beginning of the detachment from the Valley that will eventually culminate in her leaving to live with the Dayao; in short, the moment of leaving that allows her return home to herself and her community. Similarly, elaborate rites of passage - including the wearing of undyed clothing, a period of abstinence and withdrawal from some aspects of community life - are constructed around Kesh adolescence or ‘living on the coast’ (ACH, p490). For the Kesh, this is a vital stage in the channelling of “cosmic, social and personal” energies (ACH, p489). As a child grows up, its “outward-going” energy develops and differentiates, and with adolescence

all these...centrifugal, growing energies began to be doubled by the inward-coming, centripetal energies of the mature human being. The adolescent had to learn how to balance out all these forces, and so become a whole person, a ‘person entirely’...

(ACH, p490)

Adolescence is thus a ‘hinge’ moment or “reversal”, when the outgoing energies “come into the center, to work in the service of personhood, at its most vulnerable and crucial stage” (ACH, p490).

Mattapoissett has a similar ritual marking the beginning of maturity. At about fourteen, the young person goes through a rite in which they are left in one of several “wilderness areas” for a week or so. This is intended to “break dependencies” on adults and begin a process of self-reliance and self-knowledge that signifies the beginning of the development of adult subjectivity, as well as a coming of age as a full citizen (WOTET, p115). The child also meditates in order to come up with a chosen name. Naming is important in both *Always Coming Home* and *Woman on the Edge of Time*. It demonstrates both individual autonomy in Le Guin’s and Piercy’s utopian societies (Innocente, Bee’s daughter, refers to the need to ‘earn’ her name; WOTET, p116), and their fluid conceptions of identity.⁷ As in *Always Coming Home*, *Woman on the Edge of Time*’s first wilderness rite sets up a commitment to a process of self-realisation that continues throughout an individual’s life, symbolised in Piercy’s development of the concept of “inknowing” (WOTET, p139). This practice, which is taught to the youngest of children, indicates a range of modes of self-awareness both bodily and psychic. These techniques allow for the sensing and control of some physical diseases and states, but also for educating “the senses, the imagination, the social being, the intuition, the sense of beauty, as well as memory and intellect” (WOTET, p140). Most importantly, they aim to challenge the concept of human nature as atomistically embodied and to support a reciprocal and holistic concept of subjectivity that is very much in accord with the precepts of deep ecology:

‘People here in our bony skulls,’ - lightly Magdalena rapped on Connie’s forehead - ‘how easy to feel isolate [sic]. We want to root that forebrain back into a net of connecting.’
(WOTET, p140).

However, explorations of the ways in which a life shaped by ecological limits and devoid of consumerism can enhance rather than limit well-being are not confined to the ideas about personal self-development outlined above. There is also a

⁷In *Always Coming Home*, Stone Telling’s three names (her first ‘North Owl’, and her last

strong focus on a rich community life and interpersonal relationships. Le Guin uses the many rituals and holidays celebrated by the Kesh in the “World Dances” to elaborate on the quality of sociality in her Valley, one which has much in common with the porous, reciprocal concept of subjectivity suggested in *Woman on the Edge of Time*. At the Wine Dance the ‘common place’ of the village is “white with moonlight and bonfires and floodlights and crowded with the dancing and the people clowning” (ACH, p26), and the World Dance is a “participatory and emotional” ritual to remember all those who have died during the year, during which “the barriers of shame and self-containment were broken down, the fear and anger of loss made public” (ACH, p456). Mattapoissett too sometimes seems an endless round of parties and rites, with “around eighteen regular holidays, maybe another ten little ones”, as well as “feasts when we win or lose a decision and when we break production norms” (WOTET, p173). In both novels these feasts and holidays build pleasure and indulgence - ‘carnival’ as well as structure - into the narrative’s utopian society.⁸ That this device is only partly successful is perhaps inevitable; the attempt to invent a schedule for spontaneity seems doomed to fail by dint of its own contradictions. Nevertheless, Piercy’s evocation of one such party goes some way to conveying the flavour of Mattapoissettan enjoyment in terms of a multiplicity of aesthetic, sensual and sexual pleasures. Mattapoissett dresses up in provocative “flimsies”, one-off costumes made of biodegradable substances. Lit by soft floating lights, augmented by “real fireflies”, they drink and dance and smoke dope, talk and tease and laugh. There is music for dancing and listening (a quartet playing Beethoven, and later a dance band), children play hide and seek, and adults too play on swings hung from the trees, “calling to each other like a forestful of monkeys” (WOTET, p174).

‘Woman Coming Home’) mark the three stages of her journey.

⁸A notion of festivity sometimes bordering on the grotesque is also key to understanding many of the Kesh Dances, especially the Wine and the Sun, which features the “masked and cloaked “ White Clowns, nine or ten feet tall, who chase and threaten the children and are who are replaced by the homely and cheerful figures of the “Sun Clowns” distributing sweets and presents after the solstice (ACH, p468).

And there is food. Throughout *Woman on the Edge of Time*, descriptions of food - what is eaten, how, where and with whom - cohere into a central metaphor which elaborates Mattapoissett's approach to questions of need and want, and symbolises the difference between fulfilling and unfulfilling situations and lives. By describing it in detail, Piercy draws attention to the sensual and aesthetic qualities of food as well as describing how a society produces for a basic human need. Meals in the communal fooder, amongst the "scrapes of melody and laughter, the calls, the clatter of dishes and cutlery" (WOTET, p75), present a physical necessity as a social pleasure. Cooking for everyone is one of the few domestic tasks that is not strictly divided up by rota. Like the head of the children's house, or representing earth or animals on the town council (see below), being a cook is "like mothering: you must volunteer, you must feel called" (WOTET, p173). Connie approaches the food at a Matapoissettan feast with "the passion...of the institutionalised" (WOTET, p172) (which indeed she is), and one of the markers of her acceptance of the utopia is her fantasy of giving back some of the care and enjoyment it has shown her by cooking Thanksgiving for her friends (WOTET, p355). Ironically, the food of Mattapoissett will not physically nourish Connie, although her experience there both sustains her through her time in the psychiatric institution and feeds her imagination, her political will, and her capacity to take "insurgent" action. But at the same time, the fact that Connie can only "taste" food in Mattapoissett is a metaphor for the utopian experience she can only partake of at a distance, second hand (literally, through Luciente) and must act to solidify as a possible future (WOTET, p78).

In Connie's own time, food embodies a struggle for sustenance both literal and metaphorical and a desire to maintain the self against the odds, setting up a connection between food and nurture that is met and magnified in Mattapoissett. Eating alone is a strong signifier of absence of community for Piercy. In New York, Connie eats her dinner in the company of the TV news, which provides a "human - or almost human - voice" (WOTET, 49), and she makes the effort to prepare a decent dinner on her limited budget. The meagreness of Connie's meals

in her real time New York sparks her desire for more, and her experiences in Mattaposiett transmute 'more' into a subtler idea of 'better':

There wasn't enough! Oh, not enough things, sure - not enough food to eat, clothes to wear, all of that. But there wasn't enough...to do. To enjoy. Ugliness surrounded her, had imprisoned her all her life. The ugliness of tenements, slums...the grimy walls, the stinking streets, the stained air, the dark halls smelling of piss and stale cooking oil, the life like an open sore, had ground away her strength.
(WOTET, p280).

Beginning with food, then, Piercy's narrative begins to interrogate the concept of 'enough'. In Mattapoisett there is less of everything, but more is squeezed out of it. The utopians' aim is simply to have "[e]nough food, good food, nourishing food" (WOTET, p174), but the narrative emphasises its rich sensual qualities:

cold cucumber soup, flavored with mint. Slices of dark rich meat not familiar to her in a sauce tasting of port, dollops of a root vegetable like yams but less sweet and more nutty. A salad of greens with egg-garlic dressing. Young, chewy red wine.
(WOTET, p172)

The realm of productive necessity remains the privileged one in Mattapoisett, and scarce resources are used carefully, but Mattapoisett is not a dour, functional or self-denying place. Within the realities of ecological limits there are choices to be made; 'sufficiency' in *Woman on the Edge of Time* involves working creatively within them. The narrative evokes what Oscar in *Pacific Edge* only half-ironically refers to as "the aestheticization *de la vie quotidienne*" (PE, p110).

For example, one morning at breakfast Luciente's friend Barbarossa lectures Connie on why Mattapoissettans rarely drink coffee:

[it] took land needed to feed local people who were starving. Now some land is used for world luxuries, but most for necessary crops. Imagine the plantation system, people starving while big fincas owned by foreigners grew for wealthy countries as cash crops a liquid without food value, bad for kidneys, hearts, if drunk in excess.

(WOTET, p195)

Whilst everyone around the table acknowledges the validity of Barbarossa's arguments, it doesn't stop them feeling miserable and tetchy when Connie protests that she "couldn't face the day without coffee! That's the worst thing I've heard about your way of living" (WOTET, p195). In the context of the narrative, Barbarossa's dogmatic, paternalistic tone and Connie's melodramatic exaggeration both seem to overstate the issue. But in the context of the novel's politics, both make important points about the links between global sustainability and social choices, about living with the conflict between needs and wants.

POLITICAL AUTONOMY AND DECENTRALISATION

Le Guin's conception of utopia (somewhat ironically, given their very different approaches), in some ways comes close to J C Davis' assertion that it signifies the 'end of politics' (see Chapter 4 and Davis, 1981). In *Always Coming Home* there are no formal political institutions or ideological positions, or at least no recognisable ones. The political sphere as currently understood has been entirely absorbed into the realms of, on the one hand, a shared ecocentric philosophy and, on the other, the pragmatics of everyday community life. Nonetheless, it shares one important characteristic with the other ecotopias: an emphasis on decentralisation and the power of communities to shape their own lives. Whilst there are links between settlements (relying informally on good communication

and alliances that are only activated in times of need), villages and towns are fundamentally self-governed, with no state or other hierarchical power structures.

Politics is a vital and conspicuous component of the organisation of a sustainable society in *Woman on the Edge of Time* and *Pacific Edge*. Political institutions and struggles play a key part in both novels, in terms of both evoking the character of their utopian societies and in the lives of the characters. I argued in Chapter 3 that radical ecopolitical theory generally favours local autonomy and bottom-up power structures in generating sustainable ways of life, and this is most clearly the case in *Woman on Edge of Time*. Its links with anarchist and ecocommunal political philosophy are evident in the absence of any state or central authority. On her arrival in Mattapoissett, Connie is keen to see its 'government'. Believing that this future is underdeveloped, she seems to suspect that real power lies elsewhere, and is looking for something she can understand - either the "political machine" of her own time, or its opposition, the macho revolutionaries who produce only "noise in the streets" (WOTET, p154; p198). However, what Connie experiences when Luciente takes her to 'Grandcil' is very different from either. In Mattapoissett, politics is effectively split into two spheres - ecologically informed 'resource planning', and ideological debate. Politics-as-resource-planning takes the form of a representative council organised primarily at the level of the village. Representatives from the village meet with others from the region (Mouth-of-Mattapoissett) to work out their competing needs and contributions to the local self-sufficient economy. The issues raised at the meeting Connie attends are carefully chosen to represent the concrete details of managing the society-nature relationship - the distribution of scarce resources like "cement, zinc, tin, platinum, gravel, limestone" (WOTET, p150); decisions over land-clearance for crops, conflicts over local water tables, and so on.

Grandcil representatives are chosen by lot rather than election for a one year term, so that most people are likely to be involved during their lifetime. There are two non-elected representatives on the council - the Earth and Animal Advocates -

who are chosen by “dream” because of their particular affinity for nature (WOTET, p151). Whatever one may think of some of the more spiritual elements of Piercy’s novel, the idea of explicitly giving weight to the interests of nonhuman nature is an interesting way of working out the pragmatics of ecocentric principles.⁹ Each local Grandcil sends one representative to the next level of decision-making, regional planning, which retains the focus on bottom up distributional and ecological questions except on a larger scale. Luciente articulates its pyramidal structure thus: “The needs go up, and the possibilities come down” (WOTET, p153). The difficulties in this area of politics are conceived of as inevitable and ongoing but amenable to case-by-case resolution within a shared set of ecocentric values. The council structures are treated as neutral frameworks for deciding between the (often competing) wants and desires of the different communities in a way that is strangely reminiscent of the liberal ideal, with collective responsibility for the land taking the place of private property and cooperative networks replacing competitive individualism.

Matters perceived as properly ideological are dealt with differently, in ways quite unlike the calm neutrality of ‘Grandcil’. The key instances of these issues in the novel are all broadly related to human relationships with nature (population control, for example), and the most important one is the ‘Shaper-Mixer’ question. The debate over the proper extent of scientific intervention into the genetic make-up of embryos runs as a minor sub-plot through the novel and threatens to divide communities. Ideological politics is much more participatory than resource planning, although the village remains the key forum for political debate, channelled through local meetings. When such issues arise, villages argue out their own position and then elect a representative to publicly discuss it further via “holi simulcast” (WOTET, p154). Eventually, there is a plebiscite to settle the issue and “everybody votes”. Although, as Luciente points out, nobody can force

⁹- and one that has been raised in green ethical-legal debates; see for example Christopher Stone’s (1972) ‘Should Trees Have Legal Standing?: Towards Legal Rights for Natural Objects’ (and also Stone, 1987). Similar proposals have been discussed in relation to the political representation of

you to be involved, decision-making here is so integrated into social life that it is almost unthinkable not to:

People would think you no longer care. Friends might suggest you take a retreat or talk to a healer. If your mems [close friends/family] felt you'd cut them off, they might ask you to leave. If too many in a village cut off, the neighbouring villages send for a team of involvers (WOTET, p154).

Through these informal means, political involvement is made everyone's responsibility as well as their right, a responsibility which will ultimately become a matter of (very gentle) coercion. Meetings and discussions take up a great deal of time and energy. No debate is ever finally closed because, as Luciente explains, "[t]here's no final authority... we argue till we close [sic] to agree. We just continue. Oh, it's disgusting sometimes. It bottoms you" (WOTET, p154). Compromise and consensus rule the day. People take up positions passionately, but there is no legitimate basis on which any one person or body of people can impose their will on others. Politics is ordinary, not separate from everyday life, and without formal rhetoric and oratory.

In the campaign over the Shaper-Mixer debate, argument rages and notices appear all over Mattapoissett ("Do you value yourself lower than a zucchini? Vote the SHAPERS!!" WOTET, p226), and friends 'work' on each other with a combination of affection and antagonism. This constant attention to others' ideological views recurs throughout the novel. Another example would be the fierce debate between Luciente and Bolivar over their different analyses of 'the Age of Greed and Waste', reflected in Luciente's critical response to one of Bolivar and Jackrabbit's 'holis' (three-dimensional representations in sound, space and pictures). This often rather fierce disagreement also has a more personal basis; both are Jackrabbit's lover (Mattapoissettan relationships are rarely

future generations in contemporary sustainability debates; see for example Kavka and Warren, 1983.

monogamous). The argument is staged as part of what is known as a ‘worming’ or ‘critting’ session, one of the utopia’s many mechanisms for dealing with interpersonal conflict. Those involved in the quarrel gather together with their ‘mems’ (close friends and families) and everyone is encouraged to speak frankly about the sources of their dislike or grievance. Bolivar’s position is broadly eco-feminist; he sees an original patriarchal binary precipitating and legitimating all other hierarchies, suggested in the holi in the image of a male and a female figure resolving into a single androgyne (WOTET, p210). For Luciente, this device situates a complex cultural system too much in the body, and she is keen to embed Bolivar’s reading of anti-ecological patriarchy into a more materialist analysis, focusing on the instrumental attitudes fostered by capitalism:

[t]he force that destroyed so many races of beings, human and animal, was [only] in its source sexist. Its manifestation was profit-oriented greed.

(WOTET, p210)

Thus, Piercy’s narrative explores attitudes towards political difference in utopia. Bolivar and Luciente agree that “[o]ur politics give running room for disagreement” and that Matapoissetan history “isn’t a set of axioms” (WOTET, p211). The narrative seeks to show a society in which political philosophy remains a living issue and whose ideological framework remains open to debate and change.

For the contemporary reader, political difference in Mattapoissett might appear to be rather superficial. Although characters *say* that such ideological struggles are common in utopian life (see eg WOTET pp153-154), their presentation is often somewhat marginal to the central narrative, suggesting a degree of ideological consensus at odds with Piercy’s explicit intent. However, as the novel moves towards its climax and final resolution, questions of politics take on a darker aspect. As we saw in Chapter 5, the end of the novel draws a number of threads

together; as Connie's powerlessness and desperation in the psychiatric institution increase, Mattapoissett itself comes under more intense threat from the forces of the 'old order', and the utopian future itself seems to "blink out". It is at this point that the Mixer advocates come to be seen as part of a larger "power surge" (WOTET, p226), and the desire to control and use nature instrumentally begins to constitute a real threat to Mattapoissett's ecological and egalitarian values. Thus the narrative appears to embrace a degree of ideological dissonance within the utopian society. On the other hand, the question of how something comes to be constructed as a political 'issue' is not addressed in the novel, suggesting once again a typically utopian degree of ideological coherence in Mattapoissett and the world beyond. In this respect, *Woman on the Edge of Time* resembles *Always Coming Home*: opposing (non-ecological, patriarchal, hierarchial) values are consigned to the margins of their narrative worlds, carefully situated in 'outsider' groups. In *Woman on the Edge of Time*, as we saw in Chapter 5, these consist in both the remains of the old power blocs, and in the ideological threat of our own times. In Le Guin's novel, they are represented in the concepts of 'living outside the world' and the 'City of Man', as well as embodied in the Condor people, whose incursion into the Valley provokes the only recognisably political action in the book.

Pacific Edge, by contrast, is built around a degree of internal political dissonance systematically excised from the Valley and Mattapoissett. In terms of ideology, this is the most adventurous and in some ways the darkest of the three fictions. The narrative stages a confrontation between Kevin's radically ecocentric idealism and the moderate, pragmatic and structural realisation of sustainability which forms the 'iconic' register of the text. Politics, then, is central to both the plot and the setting of the novel. Robinson's future sustainable society is structured around representative, rather than participatory, party politics, dominated by the Green and the New Federalist parties. However, their global and national political structure is designed to support local decision-making and encompass a high degree of regional difference, rather than determining policy

from the top down. Kevin, uneasy at finding himself one of El Modeña's Green Party representatives, reluctantly accepts the importance of local politics to a truly sustainable society; the town council meeting represents "[t]he work of running the world, repeated thousands of times all over the globe. You could say this was where the real power lay" (PE, p24). As in *Woman on the Edge of Time*, politics is highly integrated into everyday life. Ideological issues are actively reflected on in all sorts of settings, from Kevin's energetic campaign to save Rattlesnake Hill to the fierce philosophical debate between his friends Hank and Doris as they participate in town work. However, Robinson foregrounds these issues more vividly than Piercy. In *Woman on the Edge of Time*, the 'visitor-guide' structure introduces Mattapoissett's political structures through an outsider's perspective. The Grandcil sitting, for example, is relayed from the point of view of a sympathetic but detached observer, and Luciente elaborates on the unfamiliar proceedings in, as it were, a stage whisper to Connie and to the reader. Grandcil is not so much experienced by Connie as made the object of cognitive explication. By filtering El Modeñan politics directly through Kevin's inauguration into the town council, on the other hand, Robinson ensures that its activities are not only described but experienced:

At about the fifth of the votes, he felt a strong sinking feeling: he was going to have to spend every Wednesday night for the next two years just doing this! Listening very closely to a lot of matters that didn't interest him in the slightest! How in the *hell* had he gotten himself into this?
(PE, p24).

Thus Robinson sets up his utopia as one that treats politics as important but also an occasion for sociability, typical of the loose, talky style of El Modeñan life. The inaugural council meeting features plenty of "Al Schroeder's atrocious champagne" and a mariachi band, and takes place in an open courtyard whose willow trees were hung with streamers and paper lanterns (PE, pp19).

Town meetings are held publicly and in principle anyone can ask questions from the floor. In practice, of course, turnout is variable and those with particular interests and expertise are most likely to participate. The council consists of elected representatives of the Green and New Federalist parties, bolstered by a smaller Wilderness Party and numerous other local splinters. A town lawyer and planner also sit on the council, reflecting both the legislative tenor and environmental priorities of the utopia. A hostility to unfettered development and an institutional process of extensive environmental impact assessments are embodied in the planner, and the lawyer is vital to negotiating the complex legislative basis of Robinson's utopia. The mayor, Alfredo Blair, is more like a chairperson, having "one vote like the others" (PE, p22). Party lines routinely hold but may be undercut by wilfully independent representatives like Jerry Geiger, a "loose cannon" whose voting record was "a model of inexplicable inconsistency" (PE, p22). Something of the flavour of El Modeñan politics can be inferred from the fact that Jerry's "anarchist playfulness" endears him to most of the town's voters rather than alienating them (PE, p119).

Representatives are elected to a two year term and other powerful positions are frequently rotated (PE, p23). As in *Woman on the Edge of Time*, the council's decision-making is focused on environmental resource planning issues -

A building permit battle that became a protest against town ownership of land, a zoning boundary dispute, an ordinance banning skateboards on bike trails, a proposal to alter the investment patterns of the town funds...
(PE, pp23-24)

- and in the arid climate of southern California, the distribution and availability of water is a primary concern. However, the really fundamental structures for economic sustainability, reflecting moderately ecocentric and egalitarian values, are fixed outwith the local level. Over a period of "two working generations and several Presidents" (PE, p244), global capitalism was effectively dismantled and

the world rebuilt in the image of decentralised sustainability in what Tom calls a “quiet revolution”:

We changed the law...We cut the corporate world apart. The ones that resisted and skipped to haven countries had their assets seized and distributed to local parts. We left loose networks of association, but the actual profits of any unit company were kept within in a collective fashion.

(PE, p244)

Basic resources - energy, water and land - were made the common property of regional communities. Materialist short-termism was supplanted by a newly enlightened self-interest, channeled “towards the common good” (PE, p49). The narrative implies that the radical lawyers’ group that began to challenge multinational capitalism succeeded through consensus; the “cartel world” was increasingly hated by both disempowered governments and an alienated citizenry (PE, p242). Once a radical new framework for social, political and, most importantly, economic structures were in place, new forms of life and a new ethos followed.

There is no doubt in the novel that this framework supports a form of sustainability that is *primarily* more ‘technical’ than cultural. The structural world of the novel favours a top-down, hierarchical model of change centred on political and administrative institutions. Its political organisation remains dominated by the national party machine, as Kevin learns when he seeks support from the local branch of the Green Party. His idealistic desire to preserve Rattlesnake Hill is sacrificed to the party’s need to maintain an image of reasonableness and the ability to deploy diplomacy and compromise on the bigger political stage. In the wider context, the Green party is losing ground to the New Federalists, and its leaders are not prepared to lose more in an “extremist” fight over an insignificant patch of wilderness (PE, p224); indeed, they are prepared to trade it off against other broadly preservationist concessions that Alfredo offers in

return for the development. Politics remains “the art of the possible” (PE, p225), rather than the sphere of idealist consensus implied in *Woman on the Edge of Time*.

But the tenor of the novel as a whole supports a more complex and, ultimately, more ecocentric worldview. In El Modeña, the New Federalists have been dominant for some time, and this initially allows Alfredo’s proposals for the development of Rattlesnake Hill to hold sway. Moreover, he wins the referendum forced on him by Kevin’s confrontational stance, and the town’s citizens narrowly vote for the development. But Kevin is both the narrative and the moral centre of the novel. Through his point of view, the possibility of an altogether more radically ecocentric discourse and praxis is opened up in *Pacific Edge*. Kevin stubbornly invests Rattlesnake Hill with both intrinsic value and personal emotional significance, and this valuation is echoed in other characters’ responses to the prospect of development: Doris’s rationalist articulation of an uncompromising bio-ethics, and Hank’s commitment to a spiritual deep ecology. Although Kevin begins by acting out of a personal commitment to a particular part of his landscape, he comes to represent a wider political conscience in the novel. The conflict between his passionate commitment to a deep ecological worldview and the structural possibilities of an ecological democracy is constitutive of the novel’s dialectical and open conceptualisation of sustainability. El Modeña appears to represent a structural and organisational ‘solution’ to the environmental problematic, but the novel’s discourse makes it clear that sustainability cannot finally be located here, not least because it cannot accommodate the subjective and social consequences of a nature imbued with value and meaning.¹⁰ Nor, Robinson suggests, is this structural solution to the problem of environment and development entirely acceptable to citizens of the South, who see in the post-corporate re-ordering of the world a reassertion of imperialism on the part of the US. Towards the end of the novel, Tom’s model

¹⁰The problematisation of the concept of utopia itself is also, of course, a factor here. See Chapter 5.

of sustainability is challenged by Pravi, representative of a new generation of students who are “skeptical of [their] teachers’ memories and biases” (PE, p242). Thus, the pragmatic and institutional solution to the sustainability problematic set up in the ‘iconic’ register of the text are challenged by aspects of its narrative and ideological discourse.

However, sustainability is not solely identified with Kevin’s ecocentric stance either. By the end of the novel he has won the battle over Rattlesnake Hill - not through democratic means, but by making the hill a memorial to Tom Barnard, a “shrine, inviolate”, in a ceremony that dwells on the irreducible autonomy and continuity of nature and the complex, mysterious connections between landscape, memory and subjectivity (PE, p270). But the protection of Rattlesnake Hill does not win the war, and the future relationship between El Modeña and its surrounding environment remains in the balance. And in a more emotional sense, life goes on and for Kevin goes badly: Alfredo Blair marries Kevin’s true love, Ramona; Tom is dead; “everything has gone wrong” and Kevin’s feeling for the hill cannot permanently endure (PE, p280). Here, closure around sustainability is resisted through the subtleties of a narrative that intertwines the personal and the political so that no final resolution (narrative or political) is possible. Sustainability is drawn as a process which pits desire against possibility, ephemeral moments overburdened with meaning against the everyday and the mundane, and the spiritual against the political. *Pacific Edge* shows that decentralised politics cannot guarantee total sustainability on technical criteria or in terms of outcomes. It can only offer a flexible framework that tends towards environmental caution and a radically changed social practice in favour of ecological integrity and human quality of life. But Robinson suggests that the hope for a better way of living comes first, and must continue to push against the ‘art of the possible’ to keep the possibilities of sustainability open.

EMBEDDEDNESS: UTOPIA AND (RE)INHABITATION

In Chapter 3 I argued, following Dobson, that “an ecological principle for social life might be that the best social arrangements are those that involve an embeddedness in the ‘natural’ world” (Dobson, 1995, p112). This section looks closely at the different ways in which ‘embeddedness’ is imagined in the three ecotopian novels. As we have seen previously, the decentralising, localist impulse in radical green philosophy draws heavily on the bioregionalist theory of, for example, Kirkpatrick Sale and Peter Berg, as well as being influenced by the liberatory impulse of anarchism. Defence for the idea of embeddedness in local ecosystems as key to building sustainability from the bottom up is frequently couched in terms of material/ecological pragmatism. Bookchin, for example, argues that it will encourage sustainable agriculture and energy use as well as pollution prevention (Bookchin, 1989). But as we have seen in Chapter 3, there is another, more “romantic” and cultural, dimension to the idea of living in place (Dryzek, 1997). This aspect of deep green and bioregionalist discourse speaks to the psychic, spiritual or cultural distance between human beings and the land they inhabit in late industrial modernity. Building a society in closer proximity to nature does not just involve rethinking economy and community on a much smaller scale, and in terms of a more rural existence. It is also a process of encouraging a new kind of awareness of the ecological relationships that operate within a particular ‘bioregion’, and how communities and individuals can respect and live with them. This is the basis for a conception of sustainability in which reciprocity replaces separation and ‘plain membership’ supersedes exploitation. The idea of living in place also demands a much more sensitive appreciation of the qualities and dynamics of a very *particular* ecological terrain, rather than simply relating to ‘the Environment’ in general.

This section, then, looks at the organisation of both the material/social and the cultural/cosmological dimensions of living in place, and in particular how ecocentric values and worldviews shape interactions between human beings and

nonhuman nature. It is in the exploration of what it might mean to 'live in place' that the green utopia makes its most important contribution to sustainability discourse. Embeddedness is the ground on which the utopian desire for the enhancement of human well-being meets the radical ecological commitment to the integrity of nature. New forms of green community and new kinds of ecocentric subjectivity are at the heart of the ecotopian novel, and in this respect the 'experiential' dimensions of the green narrative most clearly come into play (see Chapter 4). As Le Guin makes explicit in her critical work, these utopias attempt to dismantle the rational blueprint utopia, to "abandon the machine model and have a go at the organic" (Le Guin, 1989, p89). What Le Guin seeks, specifically, is an "inhabitable" future (p84), a "place where people can live" (p98). As we have seen in Chapters 4 and 5, this desire for inhabitability has as much to do with forms of narrative as with the 'iconic' register of the text, that is, the content of its utopian society. Inhabitability refers to what utopia itself means and how it is to be represented, and in particular to the critical utopia's attempt to show a society in motion and explore what it might feel like to live in it rather than describe its structures and legitimate them philosophically or ideologically.

However, Le Guin's idea of 'inhabitability' also evokes the bio-regionalist concept of 're-inhabitation', the idea that we must re-mould our culture to live more closely and more attentively with nature in very particular environments. Radical local-ness is a major concern for the critical green utopia at both the discursive/narrative level *and* as a vital part of the green content of the utopia in its iconic register. The novels conceive of sustainability as a primarily local affair. But they also attempt to apprehend sustainability itself differently, through an alternative epistemology that privileges contingent, subjective and situated ways of knowing over ones that are a priori, rational and detached. It is the ability of fiction to engage the reader in an experiential way in the specific concerns of a community that is physically rooted but socially kinetic that renders sustainability as a process and not as a blueprint or goal.

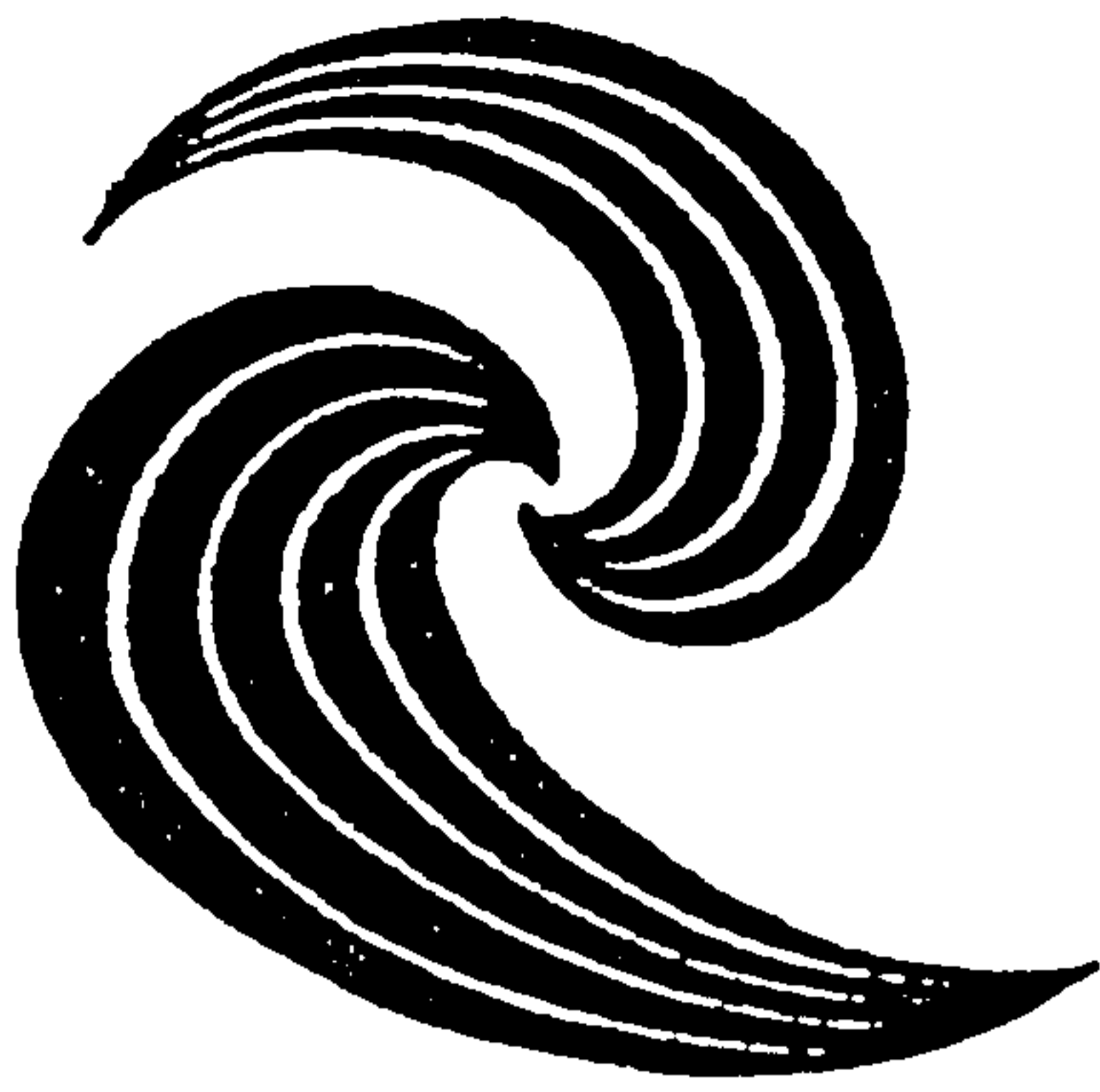


Fig 1: The 'heyiya-if', adapted from *Always Coming Home*, original illustration by Margaret Chodos.

Political decentralisation and economic self-reliance clearly form an important part of the novels' attempts to imagine some of the rational aspects of living in place. This theme is also explored through representations of the physical aspects of community, especially in *Always Coming Home*. In Le Guin's utopia, the nine towns and villages of the Valley lie scattered along the course of the river Telina and its many tributaries. Each town, large or small, holy or bustling with trade, is built on the same "ideal plan", the *heyiya-if*, a shape that derives from the idea of 'heyiya' (ACH, p411). 'Heyiya' is the most significant concept in Kesh culture, the centre of its rich metaphorical system. It refers to a sense of sacredness that derives from living mindfully in the world. Heyiya is "the word of praise and change", and its sign (the heyiya-if - see fig 1 above) is the hinged spiral (ACH, p49).¹¹ The spiral is central to Kesh cosmology as "the source of a gyring motion" which represents (non-linear) change and connection. Some of the most important connections are those between the natural and the social, home and beyond, and the sacred and the profane, and these oppositions come into play in relation to the use of the heyiya-if as the pattern for town planning.

¹¹The shape of the heyiya-if is related to the idea of the gyre discussed in Chapter 5. Pandora explains that it is "varied and elaborated in countless ways" in the Valley, and as such its representation appears in many forms throughout the text of the book. It is "the visual form of an idea which pervaded the thought and culture of the Valley" (ACH, p45).

The heyiya-if forms the “ideal plan” of the town as a two armed figure folding into/out of itself. The ‘Right Arm’ curves around to meet the ‘Left Arm’ at the town’s ‘Hinge’, which is always a source of running water or a well, and is also the site of the town’s ‘common’ and ‘dancing’ places (ACH, p411). The shape of the heyiya-if - evident on plans of the towns included in the text - cannot always be seen by the inhabitants but is always “felt, the interlocked curves springing from/returning to the center” (ACH, p411). The Right Arm of the figure holds the five sacred ‘heyimas’ or houses of Earth and Sky, which in Kesh cosmology symbolise a series of very specific interactions of human interconnections with the natural world (the lodges described above, for example, each belong to a specific ‘house’). But the five heyimas are also real, place-bound buildings that people use for meeting, worship, eating, talking, and so on. Along the Left Arm straggle domestic homes (the bigger the town, the more ‘left arms’ there are).

The idea of heyiya (and its figurative counterpart, the heyiya-if), and the system of houses that simultaneously organises built and conceptual space, operate throughout the text to construct and reinforce ideas about community and embeddedness. The heyiya-if self-consciously places the physical aspects of how people live in an (eco)philosophical dimension, so that the spatial organisation of community reflexively embodies a notion of spiritual well-being that is rooted in place. Heyiya derives from a right relationship with the natural world; the heyiya-if embodies it. For the Kesh, ‘house’ is simultaneously the physical space in which community is actively practiced (in both its ‘heyiya’/sacred aspects, in the heyiyas, and in its domestic aspects) and a powerful metaphor for their biocentrically sensitive relationship with place:

We are dwellers, not travellers... This Valley is our house, where we live.

In it we welcome guests whose house is elsewhere, on their way.

(ACH, p35)

Piercy and Robinson similarly pay close attention to the spatial organisation of community. In *Pacific Edge* the protagonist Kevin is a self-styled 'bio-architect' whose specialty is turning twentieth century apartment blocks (those "dead, inert boxes"; PE, p109) inside out into a form of housing suited to El Modeñas mode of life - messy, communal and ecofriendly. These conversions rely to some extent on 'soft' technologies (detailed above), but more on rethinking the logic of living space, community, and landscape. Kevin's own apartment block epitomises the type: "home to the whole clan", with plenty of both private and shared spaces for what he calls the "real family" - in essence something like intentional communities of friends who share domestic and childcare responsibilities. Oscar describes the "usual thing" in El Modeña as a process of blurring the boundaries between living space and ecological space:

Big clear walls make it impossible to tell if you're indoors or out, an atrium three stories tall, perhaps an aviary, solar air conditioning and refrigeration and waste disposal, some banana trees and cinammon bushes.

(PE, p32).

Practically, El Modeñan homes aspire to be "nearly self-sufficient little farms" (PE, p33), but perhaps more importantly they aspire to an aesthetics of embeddedness in place. They bring nature inside and respond reflexively to the landscape in which they are situated. They are also clearly marked as sophisticated social artefacts; Oscar calls Kevin "a sort of poet of homes", for example (PE, p76). In contrast, the buildings in Piercy's Mattapoissett are described in such a way that they appear to be trying to evolve back into their natural habitat. Constructed largely from recycled materials, buildings in *Woman on the Edge of Time* are softly shaped in natural colours that echo features of local ecology. Homes are small and low-impact, "randomly scattered among trees and shrubbery and gardens", and overrun with vegetation, "the huts crawling with grape vines and roses" (WOTET, p130 and p148). Even that most artificial and alien of structures, the brooder, is described as a "lemon mushroom pushing out

of the ground” (WOTET, p130). There is little sense that conscious human design has fashioned Mattapoissett; the main impression is one of visual continuity between ecology and human settlement. This aesthetic favours the accidental and organic, connoting social and built spaces more modest, home-spun and self-consciously simple than those in either of the other two novels. Built spaces blend into the landscape and the whole is marked by an exuberant fecundity: the social and the natural have become conceptually inseparable. Mattapoissettans are also acutely conscious of ideas around sensitivity to place, and follow bio-regionalist paradigms for ‘rehabitation’ in fragile areas, such as the Arctic circle. Here, we are told, Cree Indians have re-established a careful way of living thought to embody and keep alive an “ancient” tradition of environmental sensitivity; the Cree hunt a little, have established some indigenous forms of “far North agriculture”, and carry out some scientific studies” (WOTET, p273).

Piercy’s novel is also notable for attempting to embrace a range of cultural diversity that contrasts strongly with Robinson’s and especially Le Guin’s more inward-looking utopian worlds. The different villages in Mouth-of-Mattapoissett make up a patchwork of semi-autonomous but contiguous cultures. Mattapoissett, for example, is “Wamponaug Indian”; neighbouring Cranberry is “Harlem Black” (WOTET, p100; p103). From the meagre clues in the narrative it is hard to judge the extent to which these strangely decontextualised cultures are ‘lived’ by each village, or whether and how they inflect their inhabitants’ worldviews and traditions. There is undoubtedly a tension in the narrative between the desire to present a heterogeneous utopia and the need for Mattapoissett to represent a wider world, and in fact ‘Mattapoissett’ is fluid, functioning both as a metonym for the utopia and entirely constituting it in the narrative. Critics have also questioned the narrative’s strategy of decisively separating cultural ethnicity from ‘race’ and location (the intervention of the brooder into reproduction ensures that all conception in Mattapoissett involves a “mixed bag of genes” (WOTET, p100)). Piercy defends this in the name of making society a just and equitable melting pot; others, on the other hand, might,

like Connie, see a “thin gruel” and an artificial or invented set of cultures. However, Piercy’s novel at least attempts to elaborate a utopia in which rootedness and the demands of ecological sufficiency are compatible with social and cultural diversity. Mattapoisettans treasure diversity, because “strangeness breeds richness” (WOTET, p226), a stance that clearly echoes ecological arguments about biodiversity.

In their philosophical and experiential exploration of embeddedness, the ecocentric fictions of Piercy, Robinson and Le Guin are informed by emancipatory and philosophical strands of deep ecological discourse. As in emancipatory ecocentrism, the environmental crisis is read as an opportunity for remodelling and expanding the scope of human well-being. In these narratives, institutional sustainability can only be built on a new and more fulfilling human-social relationship with nonhuman nature. However, approaches to human emancipation and ecocentrism vary across the three novels. Whilst the emphasis in Le Guin’s and Robinson’s work is on the lived connection between individuals and nonhuman nature, Piercy’s vision of a new social-ecological relationship is predicated on a political and ethical recognition of biocentric equality. This distinction corresponds broadly with Dryzek’s differentiation between ‘rational’ and ‘romantic’ approaches in radical green philosophy (1997), or Eckersley’s two routes to an ecocentric ethics: the axiomatic and the ‘cosmological’ (Eckersley, 1992). Piercy’s conception of nature is above all a rational one; the intrinsic value and rights of nature are legitimated on the basis of a rejection of all forms of hierarchy, including the primary subordination of nature to human needs. In this respect, as well as in its anarchist-feminist rejection of state power, *Woman on the Edge of Time* works with an ecophilosophical discourse very close to Bookchin’s social ecology (see Chapter 3). The dominant conception of nature in *Always Coming Home* and *Pacific Edge*, on the other hand, arises from the characters’ intuitive apprehension of what Devall and Sessions call ‘self-in-Self’. Foundational to Robinson’s and Le Guin’s texts is the romantic notion of the subject’s sensuous perception of him/herself in relation to a wider natural reality

that is at the heart of transpersonal ecological philosophy. The following section explores how these different conceptions of ecocentrism inform the ways in which a sustainability of 'living in place' is envisaged in the three novels.

For Robyn Eckersley one of the two 'litmus tests' that define a truly ecocentric philosophy is a conception of nature rooted in the idea of wilderness, and wilderness is the main trope through which ecological integrity and human relationships with nature are represented in *Always Coming Home* and *Pacific Edge*. Both Le Guin and Robinson construct their ecological cosmology in relation to the discourse of wilderness as sublime that saturates the nature writing native to the American west.¹² Wilderness, succinctly, refers to "an extensive area where human development is absent and where natural forces are allowed to operate uncontrolled" (Golley, 1992, p31). In the transcendentalist and deep ecological traditions, nature is sublime, that is, it exceeds the capacity of the human mind to encompass it and evokes an attitude of intense awe, reverence and respect. The idea of nature as sublime is certainly present in Robinson's and Le Guin's texts, and inflects their exploration of how human beings should best live with it. However, their conceptions of nature are more complex and multifaceted than this, taking in both its grandeur *and* its ordinariness, both otherness and empathy, as we will see below.

Nonetheless, nature has a physical presence in the narratives of *Always Coming Home* and *Pacific Edge* that takes it beyond simply landscape or backdrop. Both Robinson and Le Guin find their settings in California, describing environments of contrast between stark mountains and lush valleys. Whilst the (northern Californian) Valley of *Always Coming Home* is marked and mapped by its rivers and creeks, Robinson's El Modeña (in southern California) is both drier and

¹²The preservationist writing of John Muir is seminal in the US tradition, and led to the establishing of the National Parks. The transcendentalist tradition of Emerson and Thoreau is also key here. In Britain, the writing of Edmund Burke and the Romantic poets of the 18th century form the basis of an alternative tradition. For an extensive overview, see Max Oeschlaeger's *The Idea of Wilderness*, 1991 (New Haven; Yale University Press), and Roderich Frazier Nash (1991) *Wilderness and the American Mind* (New Haven; Yale University Press).

closer to the ocean. Le Guin often invokes the physical qualities of her Valley through lists of plants: “sweetshrub and oceanspray and yellow azalea, the wild rose and the wild vine of California” in the rich land near the creeks, “thick shrubs, digger pine, fir, redwood, madrone” on the sheltered canyon sides (ACH, p50). These lists take on the quality of a litany that seeks to convey the quiddity of the landscape, its profusion and multiplicity and above all a material irreducibility that hovers just beyond language. Robinson often takes a similar tack in *Pacific Edge*, cataloguing the groves of “lemon, avocado and orange”, the “eucalyptus and palm” trees, that thrive in his imagined Orange County (PE, p1). And both Robinson and Le Guin adopt the same plant as a central metaphor: scrub oak, the main indigenous bush in uncultivated areas of California. Scrub oak stands for wilderness, for an untouched, fertile, and self-contained ‘first’ nature. However, it also enables the wilderness as sublime to be re-imagined as in some sense ordinary. Le Guin describes scrub oak as “essentially” (rather than accidentally) messy with no real use (ACH p239); Robinson as a “spiky-barked, spiky-leaved, dusty little tree”, “[s]trong, but always shedding, looks like it’s falling apart” (PE p148 and p214). For Le Guin, scrub oak is a “way in to the Valley”, much in the same way as the ‘broken pot’ discussed in Chapter 5 - the way in is through “no-account” daily life, which, for Le Guin, resists interpretation and reaches “no clear aesthetic resolution” (Khanna, 1990, p138). In *Pacific Edge*, scrub oak is part of the metaphorical system that revolves around Rattlesnake Hill which, as we have seen, plays a central part in Robinson’s narrative. Rattlesnake Hill, like scrub oak, stands for nature as wilderness and is important because of, not despite, its ordinariness. It is unfailingly described in terms of its dryness and lack of grandeur, an insignificant “mound of sandstone and sage” (PE, p29). Rattlesnake Hill is not expansive and beyond the reaches of the urban, but small and part of El Modeña itself. But the narrative weight granted by Le Guin and Robinson to the very particular places that root their utopias attests to their intrinsic value and a need to protect their integrity that goes beyond the rational political or community structures described elsewhere.

Moreover, the landscapes that play a part in *Always Coming Home* and *Pacific Edge* function as points of connection between human subjects and nonhuman nature. For Le Guin and Robinson, the situating of people in nature and in a very particular place is primary and in both texts is treated as the foundation upon which any meaningful vision of sustainability can be built. Here, the grandeur of nature and the sublime feeling achieved in its contemplation are subordinated. Its ordinariness and apparent insignificance become the point, because here is where nature is most caught up in the small narratives of personal lives. In *Pacific Edge*, the theme of subjective empathy and connection with nature is almost exclusively developed around Kevin and Rattlesnake Hill. The hill is both the site at which Kevin's relationship with nature finds its home, and a signifier for the wider aspects of that relationship. Rattlesnake Hill also constitutes Kevin's main point of connection to his family and his personal history - with his immediate family scattered across the earth and beyond, he is grounded by the knowledge that his grandfather Tom Barnard helped to plant the hill's trees as a schoolboy two generations ago. All these diverse factors feed the political agency that drives Kevin and the plot of *Pacific Edge*, which is rooted in an overwhelming sense of place.

But Kevin's encounters with the hill also involve experiential moments of acute awareness, the sense of empathetic connection with nature advocated by transpersonal ecologists as key to a new ecological ethics. In both texts the most intense route to a holistic or reciprocal relationship with nonhuman nature is rendered in terms that emphasise the sensuous and the experiential over the cognitive or political. Extensive and evocative descriptions of particular landscapes abound in both novels - the "[l]iquid white light that glazed the apricot cliffs of Corona del Mar, the needles of its Torrey pines like sprays of dark green" over Rattlesnake Hill (PE, p279); Sinshan mountain in the Valley, "long, massive and serene, the late sunlight marking one deep fold of shadow on its flank" (ACH, p165). Neither narrative restricts itself to the visual; both are alive with the sounds and especially the smells of their respective landscapes.

The dominant motif of El Modeña is what Kevin describes as its “braided smell” - “orange blossoms, cut with eucalyptus, underlaid by sage” (PE, p38; p141 are good examples). In the Valley, the “little brown birds of the chapparal flit uncertainly and say *tsp, tkk*”, the smell of blooming tarweed lingers (ACH, p181), and one can almost feel the damp of the fog that comes in from the mudlands and marshes to the northwest, “moistening and blurring and rubbing things out” (ACH, p51). It is in these richly described landscapes that the texts stage their moments of intense connection and reciprocal exchange between human consciousness and nonhuman nature. In *Pacific Edge*, Kevin experiences one such “epiphany” (PE, p38) as he bikes home after a council meeting:

He knew the configuration of every dark tree he passed, every turn in the path, and for a long moment rushing along he felt spread out in it all, interpenetrated, the smell of the plants part of him, his body a piece of the hills, and all of it cool with a holy tingling.

(PE, p28)

Kevin’s identification with a particular place emerges strongly here. The embodied nature of this identification is evoked by the associations between physical movement, sense experience, and a moment of absolute and experiential knowledge about his situatedness in the natural world. The dominant moral principle in *Pacific Edge* is built on the notion that whilst a cognitive, rational and abstract commitment to the integrity and value of ecosystems can form the basis of a sustainable society, only an emotional and spiritual apprehension of a particular place in nature can make ‘sustainability’ relate to human well-being, as it does here.

Always Coming Home’s representation of the subject’s embeddedness in nature is both more plural and more evidently socio-cultural. The idea that human beings live in transactional, reciprocal relationships with particular places saturates the cosmology and culture of all the Kesh, as we saw in the discussion of the concepts of heyiya, heyiya-if and heyimas above. Kevin’s identification with

Rattlesnake Hill is mirrored in a hundred Valley voices speaking their own epiphanies and ongoing discovery of self and nature. Le Guin describes moments of communion between human subjects and nature that are strikingly similar to those in Robinson's text, as when Stone Telling, leaving the Valley to go with her father to the city of the Dayao, finds herself "in the golden hills northeast of Clear Lake":

I began to feel the Valley behind me like a body, my own body. My feet were the sea-channels of the river, the organs and passages of my body were the places and streams and my bones the rocks...and I here lying down was a breath-soul, going farther away from that body every day. A long very thin string connected that body and that soul...

(ACH, p189).

But in *Always Coming Home*, Kesh culture offers a common framework within which such experiences can be interpreted, most notably through the concept of 'heyiya', or sacredness. The most important aspect of heyiya is that it is relational. One of Stone Telling's cousins joins the Warrior Lodge, and begins to adopt a kind of Cartesian dualism, believing that sacredness resides "in the mind-soul, the spirit" exclusively. But Stone Telling speaks for the Valley's dominant holism when she explains that

heyiya was not like that: it was the rock, it was the water running, it was the person living. If you gave Blue Rock nothing, what could it give you? If you never spoke to it, why should it speak to you? Easy enough to turn from it and say, 'the sacredness has gone out of it.' But it was you that had changed, not the rock; *you had broken the relation.*

(ACH, p179; my italics).

Thus when she encounters a water skater in a water pool Stone Telling says, "I give you what blessing I can, Silent One! Give me what blessing you can!"

(ACH, p21). Heyiya allows nature to be personified, and hence addressed and engaged with:

Everything that came to me I spoke to by name or by saying heya, the trees, fir and digger pine and buckeye and redwood and manzanita and madrone and oak, the birds, blue jay and bush tit.
(ACH, p20).

This partly explains why in Kesh culture every living thing, human and nonhuman, is called a 'person' (as in the section 'Some of the Other People of the Valley', ACH, p414). The complex conceptual categories by which the Kesh organise their relationships with nature, known as the Five Houses of Earth and the Four of Sky, include all living people, wild and domestic animals, plants, and even nonorganic entities. Kesh cosmology makes a first order distinction between wilderness and cultivation. The Four Houses of Sky embrace wilderness, myth, and the generic nature or 'essence' of things, whilst to the Five Houses of Earth belong that which is cultivated, the actual physical manifestation of animals and other entities, and their specific individual natures. Thus every aspect of living in the Valley is 'brought home' and has a place in this rich and highly specific system for understanding embeddedness in a particular place.

But whilst nature is often represented as part of society and reciprocally related to human subjectivity in Le Guin's and Robinson's texts, it is equally often shown to be fundamentally other. The attitude to nature found in transpersonal ecology is in some ways a paradoxical one, operating around heightened possibilities for both our identification with nature and our essential separateness from it insofar as we accord it intrinsic value. This paradox is essential to the vision of ecocentrism in *Pacific Edge* in a narrative that juxtaposes Kevin's deep empathy for place with glimpses of the absolute otherness of nature without ever synthesising the two poles. Rather, it is the oscillating oppositions and tension between them that inform the novel's utopian desire. In *Pacific Edge*, the

articulation of human well-being with ecological integrity embraces both the possibility of utter embeddedness in nonhuman nature and its undeniable alienness. Franko (1994) has suggested that alongside Kevin's familiarity with Rattlesnake Hill runs a stream of encounters with nature as profoundly 'other' that are incorporated into, but never explained by, the narrative. Dozing on Rattlesnake Hill, Kevin sees or dreams a presence, and it is one he has seen before:

He squinted against the two big squares of of kitchen light. Clatter of pots and voices. There it was; black shape, between the trees, about mid-grove. It too was still, and he had the sudden feeling it was looking back at himn... Too dark to really see it. It moved. Shift to the side, then gone, off into the trees. No sound at all. Kevin let out a breath. Little tingle up his spine, around the hair on the back of the neck. What the...?
(PE, p30).

These encounters with a (natural) 'other', situated in the midst of mundane domestic life, are echoed in the novel's opaque middle section, set at a party in the hills thrown to mark humanity's first landing on Mars. In a hallucinatory style that sits oddly with the understated naturalism of the rest of the narrative, this set piece describes but again never explains some of the characters' encounters with an unaccountable, ineffable something. The Mars Party is rendered through the ostensibly neutral documentation of fleeting, unelaborated, pure experience and signals a disjuncture at the heart of the novel. Franko argues that it contributes to an exploration in *Pacific Edge* of a nature that is both accessible through experiential perception and at the same time unknowable, beyond human comprehension - or at least prior to human valuation and experience. Robinson's narrative, then, offers a complicated exploration of subjectivity and human self-realisation posited on a set of constructive tensions between self and other, knowing and not-knowing, embeddedness and separation. It produces a kind of unresolved 'co-feeling' between self and nonhuman nature, a form of mutuality that transcends the rational. *Pacific Edge* offers an expansion

of human well-being through connection and reciprocity, but at the same time demands a respect for nature's separate being that brings a responsibility to resist its domestication and development. Thus the narrative incorporates the sense of a truly 'other' wilderness.

Traces of an analogous otherness are also evident in *Always Coming Home*, although once again the contrast between the individualised and unmediated experience suggested in *Pacific Edge* and the more thoroughly encultured dimensions of Le Guin's Kesh cosmology is marked. As we have seen, the people of the Valley distinguish carefully between domesticated and specific aspects of nature (belonging to the Houses of Earth) and its wild and essential elements (the Houses of Sky). It is in encounters with 'Sky people' - with wilderness - that nature's profound otherness is most often incorporated into Le Guin's text, and the figure of Coyote, the trickster, is often involved. On her walk to Grandmother Mountain, for example, Stone Telling feels herself enter Coyote's House, and is changed by her brush with an entirely alien way of being. For the Kesh, the feeling of connection with nature is mostly a benign one. The "hinge" of Stone Telling's walk on the mountain is "the golden mountain and the coyote's song; and so long as my hand and the rock touched each other I knew that I had not gone wrong" (ACH, p22); but in her encounter with the water skater detailed above, "something had come to me that I did not understand, and maybe did not want, from that strange place, the pool and the waterskater" (ACH, p22). Similarly (and in contrast to Robinson), Le Guin presents scrub oak finally as both literally and metaphorically impenetrable, apart from us and beyond us. Pandora explicitly warns against its use as an analogy or 'reading' it for our meanings. She reports no feelings for it, no sense of its majesty, or at least refuses to articulate them. Scrub oak is finally

nothing to do with us. This thing is wilderness. The civilised human mind's relation to it is imprecise, fortuitous, and full of risk. There are no shortcuts. (ACH, pp240-241)

Thus in both *Pacific Edge* and *Always Coming Home* complex and multi-faceted forms of relationship between society, individuals and nonhuman nature lie at the very heart of the 'sustainable society'. In both texts, nature is seen to be undeniably ordinary, brought into a close and quotidian relationship with patterns of human social life. Sensuous experience in nature is represented as the key point of connection that establishes the possibility of a truly ecocentric consciousness, as in transpersonal ecology. But at the same time, nature is profoundly other, a transcendental wilderness that in some respects exceeds human comprehension and resists our attempts to socialise it either physically or conceptually. Aspects of a pantheist spirituality tangibly inflect the narratives' conception of a right relationship between human and nonhuman nature. In *Always Coming Home* and particularly in *Pacific Edge*, as we have seen, nature almost becomes an autonomous actor or character in the narrative. Ecological morality is prompted by a direct, unmediated and usually individual encounter with it - sometimes mystical, sometimes mundane. Thus Robinson and Le Guin offer an essentially experiential and romantic utopian vision of a better relationship with nonhuman nature.

Woman on the Edge of Time, on the other hand, thoroughly fails Eckersley's litmus test - there is no wilderness in Piercy's utopian society. At heart, the narrative offers a rational and political approach to ecological integrity and nonhuman nature is primarily represented as a garden. It is vast, but also lush and cultivated, and this conception of the environment informs a rather different model of human well-being and ecological integrity. In fact, as we saw above in the section on built space, the novel simultaneously effects a domestication of the natural and naturalisation of the social. At the same time as the citizens of Mattapoissett nurture and nourish their environment, it harmoniously acts back, even encroaches, on them. The landscape of *Woman on the Edge of Time* is a benevolent and managed one in which "growth seemed to swarm over the land" (WOTET, p120). Its countryside is self-consciously evoked as small-scale and

familiar - especially to Connie, who on her first visit to Mattapoissett sees “ordinary black and white and brown and white cows chewing ordinary grass past a stone fence” (WOTET, p69). With Luciente she sets out towards Cranberry,

wandering a pleasant route over a curved high bridge across the river, under big and little trees, past roses drooping under the load of the rain, past willows, past boats and corn patches with pole beans and pumpkins interplanted.

(WOTET, p69).

In short, Mattapoissett and its surrounding environment (insofar as they appear in the narrative) are imagined as a huge park.

Woman on the Edge of Time's conception of community makes claims to embracing “all living”, and the bio-regionalist metaphor “at home” is used to suggest a quality of unselfconscious ease in the wider, natural world (WOTET, p248). However, the possibilities of living in place are not, as in *Pacific Edge* and *Always Coming Home*, predicated on intuitive or experiential knowledge. Whilst characters in *Woman on the Edge of Time* are given to lengthy rhetoric in which they explain the importance of land, no Mattapoissettan character has any discernable relationship with any recognisable part of it. There is much discussion of the importance of wilderness in ‘naming’ rites for example (see above), but the focus of these sections is largely on social outcomes (the child’s development into independence and citizenship), and the naming rite itself takes place ‘offstage’, as it were. It is also significant that landscape in *Woman on the Edge of Time* is almost exclusively described from the distance of an outsider’s point of view, that is, through Connie. The specificity of the local environment from an ‘insider’s’ perspective is barely touched upon, and it tends to blur into an amorphous, indistinct expanse of fertile fields and tomato plants. No native trees or shrubs or flowers are mentioned; no mountains or woods are named; no geographical features are woven into the narrative. Thus despite the importance of embeddedness in a social sense, the bioregionalist-inspired assertions of

Piercy's narrative are undermined by its curiously characterless, even generic, picture of nature. This contrasts starkly with the narrative's detailed, vivid, and idiosyncratic descriptions of Connie's New York world, where Luciente's attention is constantly distracted by unfamiliar and repellent sights, smells and sounds. In contrast to the sharply evoked ruined landscape of Connie's 'real' life, Mattapoissett's landscapes appear in rather bland and generalised terms.

In principle, Mattapoissettans make a virtue of "living in place", and set great store by being "strongly rooted" (WOTET, p124). This "sense of land, of village, and family" generates a strong commitment to ecological responsibility. Mattapoissettans see themselves as "part of the web of nature", "partners with water, air, birds, fish and trees" (WOTET, p124; p278; p125). In practice, however, the land appears rather as a setting or backdrop for the exploration of human well-being than a constitutive element in it. The ethics that connect Piercy's characters to their physical place derive largely from a rational appreciation of ecological limits and a political recognition of biocentric equality. The 'garden' of Mattapoissett grows out of an explicit, political and extensively elaborated "ethic of care". They learn "a hundred ceremonies to heal themselves to the world they live in"; from their earliest education they are taught the precautionary principle and study "living things in relation" (WOTET, p278). *Woman on the Edge of Time* is not an anthropocentric utopia - it takes biocentric equality very seriously - but the connection between human well-being and nonhuman nature is predominantly a rational and abstract rather than an experiential and concrete one. As I have suggested above, this positions Piercy's ecophilosophical discourse close to Bookchin's social ecology. In both, the link between society and nature proceeds from a cognitive or philosophical appreciation of the entwined hierarchical systems that position human beings in relations of dominance, and humanity as a whole in a superior and instrumental relation with nature.¹³ Environmental consciousness and ecological morality are

¹³It is interesting that Bookchin's work is felt to be very strongly related to New England which is of course also the setting of Piercy's novel.

arrived at through an intellectual sense of how environmental sustainability is important, both in its own right and as it underpins human happiness and quality of life. Nature has no pure, essential existence outside human culture; rather, it has been self-consciously brought into the range of social concerns. The logic of the connection between human well-being and ecological integrity is conveyed through dialogue, rhetoric and exposition, rather than the naturalistic descriptions of an irreducibly local landscape and the exploration of an individual and experiential response to it, as in *Pacific Edge* and *Always Coming Home*.

Holism, reciprocity and the alternative epistemologies associated with embeddedness are not absent from *Woman on the Edge of Time*, however. Rather than pertaining to human relationships with the local environment, these qualities are instead invested in the narrative's representation of interpersonal relationships. For all its radical changes to economic and political structures, it can be argued that what is really distinctive about Piercy's utopia is its fundamental transformation of subjectivity and personal relationships.¹⁴ In this sphere, the qualities of empathy, identification and connection are privileged over masculine rational models of self that focus on individuation, boundedness and separation. Mothering, for example, is a central theme of the novel, not only in relation to the ways in which the brooder allows the nuclear family to be deconstructed and ideas around generational continuity, but as a way of exploring the new possibilities for connection and autonomy-in-relation that the utopia presents. Throughout the narrative, conversation is presented as crucial to selfhood, both in Connie's real world (by its absence) and in Mattapoissett. In the same way as food indexes Piercy's concern with a simple but rich everyday life, the prevalence of talk in *Woman on the Edge of Time* points to a conception of self-realisation as constituted in relation to multiple others across a range of social contexts including the spaces of memory and reflection, rather than being 'achieved' in opposition to others. Mattapoissettan culture explicitly draws on

¹⁴Kumar argues that the strength of ecotopia generally lies in its imagination of "the transformation of human social relationships and the quality of individual life", rather than in the economic and technological spheres (Kumar, 1987, p414).

holistic metaphors from ecology to develop its model of self-actualisation, on its 'webs' and 'nets' of connection, on cooperation and complementarity, on equality through diversity. Whilst Piercy doesn't quite extend this reciprocal model of self and other to negotiations between human and nonhuman nature, her relational epistemology is at the heart of the novel, opening the utopia up to an exploration of experiential knowledge that casts sustainability in the light of values, meaning and culture.

CONCLUSION

This chapter has shown how the ecotopian narratives of Robinson, Piercy and Le Guin bring a distinctive understanding of sustainability to debates about the future of society and nature. Cast in the broad terms of radical emancipatory ecophilosophy, their utopian societies tell stories about the new forms of human well-being made possible by a culture of sufficiency. However, they differ from the 'greenprints' of radical ecology in two key ways.

Firstly, the forms of sustainability imagined in green utopian fiction are diverse and contingent. Blueprints for sufficiency in deep green theory tend to offer themselves as single and necessary solutions to the environmental problematic. The breadth and diversity of the ecocentric debate, its wide-ranging meditations on the multiple possibilities for relating human well-being to natural integrity, are often resolved into rigid plans of institutions and ways of life necessary to establish ecological security. By contrast, the reflexive narratives explored in this chapter suggest possible directions and concrete but contingent arrangements that are very visibly the outcome of ongoing human agency and choices. Rather than trying to solve the problem of sustainability once and for all, they use the future as a vantage point from which we might see our own direction more clearly, intimating an indeterminate range of alternatives of which this particular utopian society is simply one. As we have seen, the three novels resolve the question of the proper human social relationship to nonhuman nature in markedly different

ways, yet all retain a profound commitment to respecting biophysical limits and instituting an ecocentric ethics. Together, they demonstrate the multiplicity of ways in which sustainability can be imagined: through Piercy's garden metaphor as well as through the tropes of wilderness and 'natural cycle' that organise aspects of Robinson's and Le Guin's texts; through the politicisation of the natural imagined by Piercy and Robinson as well as the complex folk cosmology envisaged by Le Guin; through intuition and awe as well as through ethical codes and education. Rather than closing down the debate over sufficiency around final and prescriptive visions, they work to keep it open to heterogeneous possibilities.

Secondly, the green utopian fiction offers the reader experiential knowledge of the sustainable society. Through a range of narrative devices, these visions of sustainability invite our empathy and identification. Engaging stories, recognisable characters and 'thick' descriptions of specific landscapes, communities and individuals allow the question of how we might live well and in a better relationship with nonhuman nature to be re-embedded in the sphere of lived experience, culture and meaning. The abstract tenets of an ecological ethics and philosophy, the prescriptions for sufficiency articulated within ecocentric theory, are translated into whole ways of life, from their overarching institutions to the tiniest details of individual experience and interpersonal relationships. Their focus on everyday life makes the space of the sustainable society contiguous with our own ordinary experience; rather than making sustainability a prescription to which we must submit, they make it tangible and desirable.

CHAPTER 7

Conclusion: the ‘phantom studies’ of the sustainable society

The arguments in this thesis have essentially been about the different discursive resources available to us for constructing desirable green futures and considering how we might get there. It traces three developments in the sustainability debate, beginning with the policy-oriented concept of sustainable development that solidified the terms of the discourse and made it widely accessible. The Brundtland Report and the subsequent United Nations Conference on Environment and Development at Rio de Janeiro in 1992 brought together ecological issues and urgent problems of global development in the same conceptual framework. *Our Common Future* introduced the possibility of a future ‘win-win’ scenario in which both human welfare and environmental security could be assured by rethinking some of the terms of global capitalist development. However, as we have seen, its narrowly administrative and technocentric assumptions work persistently to close down the idea of sustainability around the continuation of a modified version of business as usual. The Brundtland-derived discourse of sustainability coheres around the issue of means rather than that ends, hence its colonisation by a rigidly instrumental rationality. Its defining feature is a concern with long term efficiency expressed in terms of how global systems of environment and economy can be made to function in an effective and integrated way. But in privileging the ‘how’ of sustainability, the question of what it could be or mean goes missing. Instead of scrutinising the idea of sustainable development as a series of questions - what is to be sustained, and why? what purposes do we want the continuation of ecological support, beyond survival, to serve? - *Our Common Future* simply posits that development itself is the only reliable source of human well-being.

This unreflexive approach implies that sustainable development is a universally acceptable and singular 'solution' to the environment-development problematic, which can thus be administered and applied in a top-down fashion. Sustainable development becomes something that can be achieved and, moreover, operates in the policy discourse as a worthwhile goal in its own right. Emancipatory ecocentrism, on the other hand, provides the grounds on which we can challenge the assumption that the sustainable society should be a means and not an end. In this discourse, sustainability is reconstructed as shorthand for forms of social organisation that can enhance rather than simply maintain the integrity of the natural world and the self-realisation of human beings. Radical ecologism opens out the concept of sustainability to insist that we find non-instrumental ways of valuing and relating to nonhuman nature, as well as offering an alternative way of understanding human self-realisation. Its vision of a greener and more fulfilling future is predicated on a conceptual break with current ways of life. Its assimilation of the limits to growth thesis sets up a series of material constraints on the shape of the future, but its elaboration of non-material, relational and spiritual sources of pleasure and welfare transforms these limits into possibilities. Deep green theory also attempts to find bottom-up rather than top-down routes to sustainability. Rather than being conceived as the outcome of an over-determined plan, sustainability begins with changes in consciousness and culture. Radical green discourse, then, builds meaning back into the concept of sustainability, insisting that only a new, holistic understanding of humanity's place in the natural world can secure a more satisfying and ecologically responsible future.

The imaginative, critical, and experiential qualities of the reflexive narrative ecotopia open up a third discourse of sustainability, albeit one that is significantly indebted to the emancipatory ecocentric vision. It takes on deep ecology's fundamental tenets in relation to the limits to growth thesis, the concept of sufficiency, and the need for human-social embeddedness in the natural world. In opposition to policy discourses of sustainable development, ecopolitical philosophy and ecotopian fiction mark out the terrain of new possibilities for the

sustainable society, imagining a world in which human self-realisation is central and in which the natural world is accorded value in its own right, and each guarantees the other. However, while the utopianism found in ecocentric discourse generally takes the form of vague intimations of a new metaphysics and exhortations to find new values and meanings, and particular expressions take the form of closed, system-oriented blueprints, ecotopian fiction constructs the future in terms that are simultaneously more concrete and more fluid. The narrative utopia's creation of a fully imagined green world offers a detailed and textured portrait of how it might feel to live sustainably. Simultaneously, its juxtaposition of future and present possibilities, and capacity to comment reflexively on the utopian world figured, ensures that the sustainable communities it creates remain exploratory and contingent rather than prescriptive and final approaches to the sufficient society. It is in fictional visions of sustainability that we find its most processual and questioning treatment. The open, critical qualities of Piercy's, Le Guin's and Robinson's utopias remind us that sustainability is never 'finished', but is an ongoing and uncertain process, as utopia itself is an ongoing project of creating and recreating the world. The imaginative, experiential qualities of their ecotopias, however, give us a vision of sustainability that can engage us, and play a part in elaboration of ecocentric values. Utopianism in general keeps a space open for the imagination of alternatives and the free play of desire; specific ecotopias temporarily fill it with vivid and detailed pictures of a better way of living.

None of the three discourses of sustainability discussed in this thesis uncovers the truth about nature, the environmental crisis, or the correct path for future social development. There is no single truth to be uncovered. All three discourses are what Hajer calls 'storylines', cultural constructions that make political interventions into ecological debates and rely on particular rhetorical devices and compelling narratives to frame their diagnosis of the environmental problematic and intimate a solution. We should be particularly wary of the truth claims presented in sustainable development policy discourse and ecopolitical

philosophy. The Brundtland-derived concept of sustainable development legitimates its administrative vision with reference to the presumed ontological truth of a unified biospherical reality, which must be matched by an international plan for globally managed sustainable development. Yet the objective, detached, outsider's perspective that informs this 'truth' is not necessarily more relevant to the question of sustainability than subjective and situated ones, and may be, as we have seen, less so. A similar appeal to a natural reality informs emancipatory ecocentrism. Here, however, it has less to do with the systematic interrelatedness of global environmental problems and more to do with humanity's 'proper' and embedded place in local ecosystems. The claim of many deep green theories that they have uncovered a philosophical truth about ideal forms of human social organisation legitimated with reference to an unreflexive naturalism should be viewed with equal scepticism. As we have seen, the 'lessons' nature can teach us depend upon how we interpret it in the first place. Perhaps unsurprisingly, it is the most elaborately and self-consciously fictive of the three discourses that presents options rather than prescribing solutions, undermining its own claims to ontological security even as it presents them.

I make no claim, then, that the novels offer a robust solution to the problem of sustainability, nor that they could or should replace either the pragmatic and structural concerns of policy-led approaches or the analytical rigour of oppositional deep green arguments for sufficiency. Ecotopian fictions can only help us see that there are decisions to be made about the future direction of social relationships with nature; they cannot and will not make them. Although they passionately make the case for a path to sustainability rooted in the politics of daily life, they cannot provide us with the effective model for green change so sorely lacking in both policy prescriptions for sustainable development and their deep green counterparts. Nor can the impressionistic, experiential mode of the green narrative substitute for ecopolitical theory's rational arguments and urgent prescriptions in the name of radical social change. The fictional mode allows for absences and evasions, for imagined solutions and leaps of faith, that are not

possible for more rigorous analyses. The urgent question of population, for example, goes unexamined in the novels, and none of them seriously engages with the issue of urban sustainability; all to some extent finesse away the dramatic short-term consequences of the transition from an industrial to truly post-industrial way of life. The novels constitute, rather, the 'phantom studies' of the sustainable society that Dobson has argued are so necessary to the green debate (Dobson, 1995). They allow us to indulge in a hypothetical sociology of the future, to consider its possible contours and wonder what might make it truly inhabitable. They make available, however tenuously, a worked out pattern of social life within limits; solve, however fleetingly, the problem of how a steady-state economy might work, how best to devolve power to individuals and communities, and what it might mean both practically and psychologically to live in place.

If industrial modernity has indeed been largely responsible for producing the environmental crisis, one must ask whether its distinctive rationality can provide an adequate discourse for its resolution. Administrative and technocratic articulations of sustainability reify a partial global reality and extrapolate a better future from existing social, economic and political institutions. What is needed, however, are approaches that are "constructivist rather than realist, hermeneutic rather than positivist, poetic rather than technological, situated rather than disembodied" (Szerszynski et al, 1995, p2). These qualities can all be found in deep green theory. However, their expression in narrative form allows for an unfettered poetics of desire and a density of situated, specific detail that makes the visions of ecotopian fiction truly distinctive. By attending not simply to the content of the green utopia but to the way it is articulated, we can illuminate important aspects of the relationship between our own societies and sustainable ones, as well as uncovering an experiential approach to emancipatory ecocentrism that cannot be found elsewhere. The hope of expanding human well-being whilst securing ecological integrity becomes a tangible, vibrant and persuasive one.

Bibliography

Adam, Barbara (1996) 'Re-vision: The Centrality of Time for an Ecological Social Science Perspective' in (eds) Lash, Szerszynski and Wynne *Risk, Environment and Modernity: Towards a New Ecology* London; Sage

Adam, Barbara (1990) *Time and Social Theory* Cambridge; Polity Press

Adam, Barbara (1988) 'Social vs Natural Time: A Traditional Distinction Re-examined' in (eds) Young and Schuller *The Rhythms of Society* London; Routledge

Aldiss, Brian (with Wingrove, David) (1986) *Trillion Year Spree: The History of Science Fiction* London; Victor Gollancz

Anderson, Victor (1991) *Alternative Economic Indicators* London; Routledge

Bahro, Rudolf (1986) *Building the Green Movement* London; GMP

Balsamo, Ann (1996) *Technologies of the Gendered Body: Reading Cyborg Women* London; Duke University Press

(eds) Barr, Marleen S and Smith, Nicholas D (1983) *Women and Utopia: Critical Interpretations* Lanham, MD; University Press of America

(ed) Barr, Marleen S (1981) *Future Females: A Critical Anthology* Bowling Green, Ohio; Bowling Green State University Popular Press

Barry, John (1994) 'The Limits of the Shallow and the Deep: Green Politics, Philosophy, and Praxis' in *Environmental Politics* Vol 3 No 3

Bartkowski, Frances (1989) *Feminist Utopias* London; University of Nebraska Press

Beck, Ulrich (1995) *Ecological Politics in an Age of Risk* Cambridge; Polity Press

Beck, Ulrich (1992) *Risk Society: Towards a New Modernity* London; Sage

(eds) Bird, Jon, Curtis, Barry, Putnam, Tim, Robertson, George and Tickner, Lisa (1993) *Mapping the Futures: Local Cultures, Global Change* London; Routledge

Bookchin, Murray and Foreman, Dave (1991) *Defending the Earth: A Dialogue Between Murray Bookchin and Dave Foreman* (edited and with an introduction by Steve Chase) Boston, Mass; South End Press

Bookchin, Murray (1989) *Remaking Society* Montreal and NY; Black Rose Books

Bookchin, Murray (1988) *Towards an Ecological Society* Montreal; Black Rose Books

Bookchin, Murray (1982) *The Ecology of Freedom* Palo Alto, Calif; Cheshire Books

- Bramwell, Anna (1989) *Ecology in the Twentieth Century* New Haven and London; Yale University Press
- Burke, Tom (1995) 'View from the Inside: UK Environmental Policy Seen from a Practitioner's Perspective' in (ed) Gray, S *UK Environmental Policy in the 1990s* London; Macmillan
- Button, John (1988) *A Dictionary of Green Ideas: Vocabulary for a Sane and Sustainable Future* London; Routledge
- Callenbach, Ernest (1988) *Ecology: A Pocket Guide* Calif; University of California Press
- Callenbach, Ernest (1981) *Ecotopia Emerging* Berkeley, Calif; Banyan Tree Books
- Callenbach, Ernest (1978) *Ecotopia* London; Pluto Press
- (eds) Clute, John and Nicholls, Peter (1993) *The Encyclopaedia of Science Fiction* (2nd edition) London; Orbit,
- Cole, H S, Freeman, Christopher, Jahoda, Marie and Pavitt, K L R (1974) *Thinking about the Future: A Critique of The Limits to Growth* London; Chatto and Windus
- Cooper, David E (1992) 'The Idea of Environment' in (eds) Cooper, David E and Palmer, Joy *The Environment in Question: Ethics and Global Interests* London; Routledge
- Cotgrove, Stephen (1982) *Catastrophe or Cornucopia: The Environment, Politics and the Future* Chichester; John Wiley
- Cotgrove, Stephen (1976) 'Environmentalism and Utopia' in *Sociological Review* No 24 pp23-427
- Cranny-Francis, Anne (1990) *Feminist Fiction: Feminist Uses of Generic Fiction* Oxford; Polity Press
- Daly, Herman (1992) *Steady-State Economics* (2nd ed) London; Earthscan
- Daly, Herman (1977) 'The Steady-State Economy: What, Why and How' in (ed) Pirages, David *The Sustainable Society* New York; Praeger
- Davis, J C (1987) 'Utopia, Science and Social Science' in (ed) Kamenka, Eugene *Utopias* Oxford; Oxford University Press
- Davis, J C (1984) 'The History of Utopia: the Chronology of Nowhere' in (eds) Alexander, Peter and Gill, Roger *Utopias* London; Gerald Duckworth and Co
- Davis, J C (1981) *Utopia and the Ideal Society* Cambridge; Cambridge University Press
- Day, Phyllis J (1982) 'Earthmother/Witchmother: Feminism and Ecology Renewed' in *Extrapolation* Vol 23, Spring 1982, pp12-21

De Geus, Marius (1999) *Ecological Utopias: Envisioning the Sustainable Society* Utrecht, Neth; International Books

Delany, Samuel R 'Generic Protocols: Science Fiction and Mundane' in (eds) de Lauretis, Theresa, Huyssen, Andrew, Woodward, Kathleen *The Technological Imagination Theories and Fictions* Madison, Wisconsin; Coda Press

De Lauretis, Theresa (1980) 'Introduction – Science Fiction' in (eds) de Lauretis, Theresa, Huyssen, Andrew, Woodward, Kathleen *The Technological Imagination Theories and Fictions* Madison, Wisconsin; Coda Press

Department of the Environment (DoE) (1990) *This Common Inheritance: A Summary of the White Paper on the Environment* London; HMSO

Department of Environment, Trade and the Regions (DETR) (1999) *A Better Quality of Life: A Strategy for Sustainable Development in the United Kingdom*
<http://www.environment.detr.gov.uk/sustainable/quality/index.htm> consulted 10/10/99

Devall, Bill and Sessions, George (1985) *Deep Ecology* Salt Lake City; Peregrine Smith Books

Disch, Thomas M (1976) *The New Improved Sun: An Anthology of Utopian Science Fiction* London; Hutchinson

Dobson, Andrew (1995) *Green Political Thought: An Introduction* (2nd edition) London; Unwin Hyman

(ed) Dobson, Andrew (1991) *The Green Reader* London; Andre Deutsch

(eds) Donawerth, Jane L and Kolmarten, Carol A (1994) *Utopian and Science Fiction by Women: Worlds of Difference* Syracuse, NY; Syracuse University Press

Dryzek, John S (1997) *The Politics of the Earth: Environmental Discourses* Oxford; Oxford University Press

Dryzek, John (1987) *Rational Ecology: Environment and Political Economy* New York; Blackwell

Eckersley, Robyn (1992) *Environmentalism and Political Theory: Towards an Ecocentric Approach* NY; State University of NY Press

Eder, Klaus (1996) 'The Institutionalisation of Environmentalism: Ecological Discourse and the Second Transformation of the Public Sphere' in (eds) Lash, Szerszynski and Wynne *Risk, Environment and Modernity: Towards a New Ecology* London; Sage

Engels, Friedrich (1993) *Socialism: Utopian and Scientific* London; Bookmarks

Erlich, Richard D (2000) *Coyote's Song: The Teaching Stories of Ursula K Le Guin* Erlich/Science Fiction Association <http://www.sfra.org/Coyote/alwayshome.htm>
downloaded 28/12/2000

- Eyerman, Ron and Jamison, Andrew (1991) *Social Movements: A Cognitive Approach* Cambridge; Polity Press
- (ed) Featherstone Mike, and Burrows, Roger (1995) *Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiment* London; Routledge
- Featherstone, Mike (1990) 'Global Culture: An Introduction' in (ed) Featherstone, Mike *Global Culture: Nationalism, Globalisation and Modernity* London; Sage
- Ferns, Chris (1988) 'Dreams of Freedom: Ideology and Narrative Structure in the Utopian Fictions of Marge Piercy and Ursula K Le Guin' in *English Studies in Canada* Vol 14 No 4 pp453-466
- Finley, M I (1967) 'Utopianism Ancient and Modern' in (eds) Wolff, K H and Moore Jr, Barrington, *The Critical Spirit: Essays in Honor of Herbert Marcuse*
- Firestone, Shulamith (1979) *The Dialectic of Sex: The Case for Feminist Revolution* (with Introduction by Rosalind Delmar) London; The Women's Press
- (eds) Fischer, Frank and Black, Michael (1995) *Greening Environmental Policy: The Politics of a Sustainable Future* London; Paul Chapman Publishing Ltd
- Fitting, Peter (1994) 'Beyond the Wasteland: A Feminist in Cyberspace' in *Utopian Studies* Vol 5 No 2 pp4-15
- Fitting, Peter (1990) 'The Turn from Utopia in Recent Feminist Fiction' in (eds) Jones, Libby Falk and Goodwin, Sarah Webster *Feminism, Utopia and Narrative* Knoxville, Tenn; University of Tennessee Press
- Fox, Warwick (1990) *Towards a Transpersonal Ecology: Developing New Foundations for Environmentalism* Boston; Shambhala
- Frankel, Boris (1987) *The Post-Industrial Utopians* Cambridge; Polity Press
- Franko, Carol (1997) 'The I-We Dilemma and 'Utopian Unconscious' in Wells' *The Sleeper Wakes* and Le Guin's *The Lathe of Heaven*' in (eds) Hassler, Donald M and Wilcox, Clyde *Political Science Fiction* Columbia, South Carolina; University of South Carolina Press
- Franko, Carol (1994) 'Working the 'In-Between': Kim Stanley Robinson's Utopian Fiction' in *Science Fiction Studies* Vol 21 No 2 pp191-211
- Freibert, Lucy M (1983) 'World Views in Utopian Novels by Women' in (eds) Barr, Marleen and Smith, Nicholas D *Women and Utopia: Critical Interpretations* Lanham, MD; University Press of America
- Frye, Northrop (1967) 'Varieties of Literary Utopias' in (ed) Manuel, Frank E *Utopias and Utopian Thought* Boston; Beacon Press

- Gearhart, Sally Miller (1985) *The Wanderground: Stories of the Hill Women* London; The Women's Press
- Geoghegan, Vincent (1987) *Utopianism and Marxism* London; Methuen
- Gibson, William (1988) 'Getting out of the Gernsback continuum' in (ed) Sterling, Bruce *Mirror Shades: The Cyberpunk Anthology* NY; Ace Books
- Gifford, Terry (2002) 'Towards a Post-Pastoral View of British Poetry' in (ed) Parham, John *The Environmental Tradition in English Literature* Aldershot; Ashgate
- Gilligan, Carol (1982) *In a Different Voice: Psychological Theory and Women's Development* Cambridge Mass; Harvard University Press
- Gilman, Charlotte Perkins (1992) *Herland* London; The Women's Press
- (eds) Glasbergen, Peter and Blowers, Andrew (1995) *Perspectives on Environmental Problems* London; Arnold
- Goldsmith, Edward (1988) *The Great U-Turn: Deindustrializing Society* Devon; Green Books
- Goldsmith, Edward et al (1972) 'A Blueprint for Survival' in *The Ecologist* Vol No 1 (January 1972)
- Golley, Frank B (1992) 'Environmental Attitudes in North America' in (eds) R J Berry *Environmental Dilemmas: Ethics and Decisions* London; Chapman and Hall.
- Goodwin, Barbara and Taylor, Keith (1982) *The Politics of Utopia: A Study in Theory and Practice* London; Hutchinson
- Gorz, Andre (1987) *Ecology as Politics* London; Pluto Press
- Gorz, Andre (1985) *Paths to Paradise: On the Liberation from Work* London; Pluto Press
- Grove-White, Robin (1996) 'Environmental Knowledge and Public Policy Needs: On Humanising the Research Agenda' in (eds) Lash, Szerszynski and Wynne *Risk, Environment and Modernity: Towards a New Ecology* London; Sage
- Hajer, Maarten A (1996) 'Ecological Modernisation as Cultural Politics' in (eds) Lash, Szerszynski and Wynne *Risk, Environment and Modernity: Towards a New Ecology* London; Sage
- Hajer, Maarten A (1995) *The Politics of Environmental Discourse: Ecological Modernisation and the Policy Process* Oxford; Clarendon Press
- Hannigan, John (1995) *Environmental Sociology: A Social Constructionist Perspective* London; Routledge

Haraway, Donna (1990) 'A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980s' in (ed) Nicholson, Linda J *Feminism/Postmodernism* London; Routledge

Harvey, David (2000) *Spaces of Hope* Edinburgh; Edinburgh University Press

Hayward, Tim (1994) *Ecological Thought: An Introduction* Cambridge; Polity Press

Holmberg, Johan, Thomson, Kay and Timberlake, Lloyd (1993) *Facing the Future: Beyond the Earth Summit* London; Earthscan

Huxley, Aldous (1972) *Island* London; Chatto and Windus

Illich, Ivan (1973) *Tools for Conviviality* New York; Harper and Row

Irvine, Sandy and Ponton, Alex (1988) *A Green Manifesto: Policies for a Green Future* London; Macdonald and Co

Irwin, Alan, Georg, Susse and Vergragt, Philip (1994) 'The Social Management of Environmental Change' in *Futures* Vol 26 No 3 pp323-334

Jackson, Cecile (1994) 'Gender Analysis and Environmentalisms' in in (eds) Redclift, Michael and Benton, Ted *Social Theory and the Global Environment* London; Routledge

Jacobs, Michael (1994) 'The Limits of Neo-Classicism: Towards an Institutional Environmental Economics' in (eds) Redclift, Michael and Benton, Ted *Social Theory and the Global Environment* London; Routledge

Jacobs, Michael (1991) *The Green Economy: Environment, Sustainable Development and the Politics of the Future* London; Pluto Press

Jacobs, Naomi (1997) 'Failures of the Imagination in *Ecotopia*' in *Extrapolation* Vol 38 No 4 pp318-326

Jacobs, Naomi (1988) 'Beyond Stasis and Symmetry: Le Guin, Lessing and the Remodeling of Utopia' in *Extrapolation* Vol 29 No 1 pp34-45

James, Edward (1992) Review of *Pacific Edge* by Kim Stanley Robinson in *Foundation* No 54 pp123-128

Jameson, Fredric (1992) 'Progress Versus Utopia:, or, Can we Imagine the Future' in *Science Fiction Studies* No 9 pp147-158

Jamison, Andrew (1996) 'The Shaping of the Global Environmental Agenda: The Role of Non-Governmental Organisations' in (eds) Lash, Szerszynski and Wynne *Risk, Environment and Modernity: Towards a New Ecology* London; Sage

Jones, Libby Falk (1990) 'Gilman, Bradley, Piercy and the Evolving Rhetoric of Feminist Utopias' in (eds) Jones, Libby Falk and Godwin, Sarah Webster *Feminism, Utopia and Narrative* Fort Knox TN; University of Tennessee Press

José, Jim (1991) 'Reflections on the Politics of Le Guin's Narrative Shifts' in *Science Fiction Studies* Vol 18 pp180-197

Kavka, Gregory S and Warren, Virginia (1983) 'Political Representation for Future Generations' in (eds) Elliot and Gare *Environmental Philosophy* Milton Keynes; Open University Press

Khanna, Lee Cullen (1990) 'Woman's Utopias: New Worlds, New Texts' in (eds) Jones, Libby Falk and Godwin, Sarah Webster *Feminism, Utopia and Narrative* Fort Knox TN; University of Tennessee Press

Khanna, Lee Cullen (1981) 'Women's Worlds: New Directions in Utopian Fiction' in *Alternative Futures* Vol 4 pp47-60

Kramer, Leonie 'Utopia as Metaphor' in (ed) Kamenka, Eugene *Utopias* Oxford; Oxford University Press

Kumar, Krishan (1993) 'The End of Socialism? The End of Utopia? The End of History?' in (eds) Kumar, Krishan and Bann, Stephen *Utopias and the Millenium* London; Reaktion Books

Kumar, Krishan (1990) 'Utopian Thought and Communal Practice: Owen and the Owenite Communities' in *Theory and Society* Vol 19 No 1 pp1-35

Kumar, Krishan (1987) *Utopia and Anti-Utopia in Modern Times* Oxford; Blackwell

Kumar, Krishan (1981) 'Primitivism in Feminist Utopias' in *Alternative Futures* Vol 4 (Spring/Summer 1981) pp61-66

Kuryllo, Helen A (1994) 'Cyborgs, Sorcery and the Struggle for Utopia' in *Utopian Studies* Vol 5 No 2 pp50-55

Lafferty, William M (1995) 'Sustainable Development in the European Union' in (Eds) Lovenduski, Joni and Stanyer, Jeffrey *Contemporary Political Studies* Vol 1; Belfast; the Political Studies Association of the United Kingdom

(eds) Lash, Scott, Szerszynski, Bronislaw and Wynne, Brian (1996) *Risk, Environment and Modernity: Towards a New Ecology* London; Sage

Lefanu, Sarah (1989) 'Popular Writing and Feminist Intervention' in (ed) Longhurst, Derek *Gender, Genre and Narrative Pleasure* London; Unwin Hyman

Lefanu, Sarah (1988) *In the Chinks of the World Machine: Feminism and Science Fiction* London; The Women's Press

Le Guin, Ursula K (1989) *Dancing on the Edge of the World: Thoughts on Words, Women, Places* New York; Grove Press

Le Guin, Ursula K (1986) *Always Coming Home* London; Victor Gollancz

Le Guin, Ursula K (1975) *The Dispossessed* Herts; Granada Publishing Ltd

- Leiss, William (1988) *The Limits to Satisfaction: An Essay on the Problem of Needs and Commodities* Kingston and Montreal; McGill-Queens University Press
- Levitas, Ruth (1993) 'The Future of Thinking About the Future' in (eds) Bird, Jon, Curtis, Barry, Putnam, Tim, Robertson, George and Tickner, Lisa *Mapping the Futures: Local Cultures, Global Change* London; Routledge
- Levitas, Ruth (1990) *The Concept of Utopia* Hemel Hempstead; Philip Allen
- Levitas, Ruth (1984) 'Need, Nature and Nowhere' in (eds) Alexander, Peter and Gill, Roger *Utopias* London; Gerald Duckworth and Co.
- Lovelock, James E (1987) *Gaia: A New Look at Life on Earth* Oxford; Oxford University Press
- McNaghten, Phil, Grove-White, Robin, Jacobs, Michael and Wynne, Brian (1995) *Public Perceptions of Sustainability in Lancashire: Indicators, Institutions, Participation* Preston; Lancashire County Council/Centre for the Study of Environmental Change
- Marcuse, Herbert (1991) *One-Dimensional Man* London; Routledge
- Marshall, Peter (1994) *Nature's Web: Rethinking our Place on Earth* NY; Paragon House
- Martell, Luke (1994) *Ecology and Society* Cambridge; Polity Press
- Meadows, Donella H, Meadows, Denis L, and Randers, Jørgen (1992) *Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future* Toronto; McLelland and Stuart
- Meadows, Donella H, Meadows, Denis L, Randers, Jørgen and Behrens, William (1972) *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* London; Earth Island Ltd
- Merchant, Carolyn (1992) *Radical Ecology: The Search for a Liveable World* London; Routledge
- Middleton, Neil, O'Keefe, Phil and Moyo, Sam (1993) *The Tears of the Crocodile: From Rio to Reality in the Developing World* London; Pluto Press
- Milton, Kay (1996) *Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse* London; Routledge
- More, Thomas (1965) *Utopia* London; Penguin
- Morris, William (1972) 'News from Nowhere' in *Three Works by William Morris* NY; International Publishers
- Morton, A L (1969) *The English Utopia* London; Lawrence and Wishart

Moylan, Tom (1986) *Demand the Impossible: Science Fiction and the Utopian Imagination* NY; Methuen

McLoughlin, Maryanne (1992) 'Female Utopian Writers and the Environment' in *The CEA Forum* Vol 22 No 1 pp3-6

McManus, Phil (1996) 'Contested Terrains: Politics, Stories and Discourses of Sustainability' in *Environmental Politics* Vol 5 No 1 pp48-73

Naess, Arne (1973) 'The Shallow and the Deep, Long-Range Ecology Movement' in *Inquiry* No 16 pp95-100

Nicholls, Peter (1993) 'Holocaust and After' in (eds) Clute, John and Nicholls, Peter *The Encyclopaedia of Science Fiction* (2nd edition) London; Orbit

Nisbet, Robert (1974) *The Social Philosophers: Community and Conflict in Western Thought* London; Heinemann

Oelschlaeger, Max (1991) *The Idea of Wilderness* New Haven and London; Yale University Press

O'Neill, John (1993) *Ecology, Policy and Politics: Human Well-Being and the Natural World* London; Routledge

O'Riordan, Tim (1988) 'The Politics of Sustainability' in (ed) Turner, R Kerry *Sustainable Environmental Management: Principles and Practice* London; Bellhaven Press

O'Riordan, Tim (1976) *Environmentalism* London; Pion

Palmer, Joy (1992) 'Towards a Sustainable Future' in *The Environment in Question: Ethics and Global Interests* London; Routledge

Patterson, Allan and Theobald, Kate S (1995) 'Sustainable Development, Agenda 21 and the New Local Governance in Britain' in *Regional Studies* Vol No 8 pp773-778

Pearce, David, Markandya, Anil and Barbier, Edward (1989) *Blueprint for a Green Economy* London; Earthscan

Pearce, David, Barbier, Edward, Markandya, Anil, Barrett, Scott, Turner, R Kerry and Swanson, Timothy (1991) *Blueprint 2: Greening the World Economy* London; Earthscan

Pepper, David (1996) *Modern Environmentalism: An Introduction* London; Routledge

Pepper, David (1991) *Communes and the Green Vision: Counterculture, Lifestyle and the New Age* London; Green Print

Pepper, David (1984) *The Roots of Modern Environmentalism* London; Routledge

- Pfaelzer, Jean (1994) 'Subjectivity as Feminist Utopia' in (eds) Donawerth, Jane L and Kolmarten, Carol A *Utopian and Science Fiction by Women: Worlds of Difference* Syracuse, NY; Syracuse University Press
- Piercy, Marge (1994) 'Telling Stories about Stories' in *Utopian Studies* Vol 5 No 2 pp1-3
- Piercy, Marge (1992) *Body of Glass* London; Michael Joseph Ltd (published in the US as *He, She and It*)
- Piercy, Marge (1979) *Woman on the Edge of Time* London; The Women's Press
- (ed) Pirages, David Clark (1977) *The Sustainable Society: Implications for Limited Growth* London; Praeger Publishers
- Plumwood, Val (1988) 'Women, Humanity and Nature' in *Radical Philosophy* Spring 1988 pp16-24
- Plumwood, Val (1986) 'Ecofeminism: An Overview and Discussion of Positions and Arguments' in *Australasian Journal of Philosophy* Supplement to Vol 64, June 1986, pp120-138
- Porritt, Jonathan and Winner, David (1988) *The Coming of the Greens* London; Fontana
- Pringle, David (1993) 'Pastoral' in (eds) Clute, John and Nicholls, Peter *The Encyclopaedia of Science Fiction* (2nd ed) London; Orbit
- Redclift, Michael (1996) *Wasted: Counting the Costs of Global Consumption* London; Earthscan
- Redclift, Michael (1989) *Sustainable Development: Exploring the Contradictions* London; Routledge
- Regan, Tom (1984) 'The Case for Animal Rights' in (ed) Peter Singer *Applied Ethics* Oxford; Oxford University Press
- Robinson, Kim Stanley (1995) *Pacific Edge* London; HarperCollins
- Robinson, Kim Stanley (1995) *The Gold Coast* London; HarperCollins
- Robinson, Kim Stanley (1994) *Future Primitive: The New Ecotopias* New York; Tor
- Robinson, Kim Stanley (1994) *The Wild Shore* London; HarperCollins
- Rosss, Andrew (1991) *Strange Weather: Culture, Science and Technology in the Age of Limits* London; Verso
- Roszak, Theodore (1979) *Person/Planet: The Creative Disintegration of Industrial Society* London; Victor Gollancz
- Ruppert, Peter (1986) *Reader in a Strange Land: The Activity of Reading Literary Utopias* Athens, GA; University of Georgia Press

- Russ, Joanna (1995a) 'Recent Feminist Utopias' in *To Write Like a Woman: Essays in Feminism and Science Fiction* Bloomington, Indiana; Indiana University Press
- Russ, Joanna (1995) 'Speculations: The Subjunctivity of Science Fiction' in *To Write Like a Woman: Essays in Feminism and Science Fiction* Bloomington, Indiana; Indiana University Press
- Russ, Joanna (1985) *The Female Man* London; The Women's Press
- Ryle, Martin (2002) 'After Organic Community: Ecocriticism, Nature and Human Nature' in (ed) Parham, John *The Environmental Tradition in English Literature* Aldershot; Ashgate
- Sandbach, F (1980) *Environment, Ideology, Policy* Oxford; Blackwell
- Sharachchandra, Lélé (1991) 'Sustainable Development: A Critical Review' in *World Development* Vol 19 No 6 pp607-621
- Sachs, Wolfgang (1999) *Planet Dialectics: Explorations in Environment and Development* London; Zed Books
- Sachs, Wolfgang (1994) 'The Blue Planet: An Ambiguous Modern Icon' in *The Ecologist* Vol 24 No 5 pp170-175
- Sale, Kirkpatrick (1985) *Dwellers in the Land: The Bioregional Vision* San Francisco, CA; Sierra Club
- Sargeant, Lyman Tower (1993) 'A New Anarchism: Social and Political Ideas in Some Recent Feminist Eutopias' in eds) Barr, Marleen and Smith, Nicholas D *Women and Utopia: Critical Interpretations* Lanham, Md; University Press of America
- Sargent, Lyman Tower (1988) *British and American Utopian Literature, 1516-1985: An Annotated, Chronological Biography* London and NY; Garland Publishing
- Sargisson, Lucy (1996) *Contemporary Feminist Utopianism* London; Routledge
- Saunders, Peter (1995) *Capitalism: A Social Audit* Milton Keynes; Open University Press
- Saward, Michael (1993) 'Green Democracy' in (ed) Dobson, Andrew and Lucardie, Paul *The Politics of Nature: Explorations in Green Political Theory* London; Routledge
- Shiva, Vandana (1993) *Monocultures of the Mind: Biodiversity and Biotechnology* London; Zed Books
- Shiva, Vandana (1992) 'Recovering the Real Meaning of Sustainability' in *The Environment in Question: Ethics and Global Interests* London; Routledge
- Simon, Julian and Kahn, Herbert (1984) *The Resourceful Earth: A Response to Global 2000* Oxford; Blackwell

- Sitarz, Daniel (1993) *Agenda 21: The Earth Summit Strategy to Save Our Planet* Boulder, Colo; Earthpress
- Slotkin, Alan R (1997) 'The Ecological Newspeak of Kim Stanley' *American Speech* Vol 72 No 4 pp440-443
- (ed) Smith, Curtis C (1986) *Twentieth Century Science Fiction Writers* Chicago and London; St James' Press
- Soper, Kate (1995) *What is Nature? Culture, Politics and the Non-Human* Oxford; Blackwell
- Spain, Daphne (1995) 'Sustainability, Feminist Visions and the Utopian Tradition' in *Journal of Planning Literature* Vol 9 No 4 pp362-368
- Stableford, Brian (1993a) 'Pollution' in (eds) Clute, John and Nicholls, Peter (1993) *The Encyclopaedia of Science Fiction* (2nd edition) London; Orbit
- Stableford, Brian (1993b) 'Ecology' in (eds) Clute, John and Nicholls, Peter (1993) *The Encyclopaedia of Science Fiction* (2nd edition) London; Orbit
- Stableford, Brian (1978) *The Sociology of Science Fiction* PhD thesis, University of York.
- Stapleton, Amy (1993) *Utopias for a Dying World: Contemporary German Science Fiction's Plea for a New Ecological Awareness* New York; Peter Laing Publishing
- Stone, Christopher D (1972) 'Should Trees Have Legal Standing?: Towards Legal Rights for Natural Objects' in *Southern California Law Review* No 45 pp450-510
- Stone, Christopher D (1987) *Earth and Other Ethics: The Case for Moral Pluralism* New York; Harper and Row
- Suvin, Darko (1980) 'Science Fiction and the Novum' in (eds) de Lauretis, Theresa, Huyssen, Andrew, Woodward, Kathleen *The Technological Imagination Theories and Fictions* Madison, Wisconsin; Coda Press
- Suvin, Darko (1979) *Metamorphoses of Science Fiction* New Haven; Yale University Press
- Suvin, Darko (1976) 'On the Poetics of the Sf Genre' in (ed) Rose, Mark *Science Fiction: A Collection of Critical Essays* Englewood Cliffs, NJ; Prentice Hall Inc
- Szerszynski, Bronislaw, Lash, Scott and Wynne, Brian (1996) 'Introduction: Ecology, Realism and the Social Science' in (eds) Lash, Szerszynski and Wynne *Risk, Environment and Modernity: Towards a New Ecology* London; Sage
- Thompson, E P (1975) *William Morris: Romantic to Revolutionary* (2nd ed) New York; Pantheon Books

- Torgerson, Douglas (1995) 'The Uncertain Quest for Sustainable Development: Public Discourse and the Politics of Environmentalism' in (eds) Fischer, Frank and Black, Michael *Greening Environmental Politics: The Politics of a Sustainable Future* London; Paul Chapman Publishing Ltd
- United Nations Association (UK) (1995) *Towards Local Sustainability: A Review of Current Activity on Local Agenda 21 in the UK* London; UN
- United Nations Conference on Environment and Development (UNCED) (1993) *Agenda 21: Programme of Action for Sustainable Development* New York; UN
- United Nations Environment and Development (UK Committee) (1995) *Sustaining Developments Since the Rio Summit* London; UNED-UK
- Veldman, Meredith (1994) *Fantasy, the Bomb and the Greening of Britain* Cambridge; Cambridge University Press
- Vincent, A (1993) 'The Character of Ecology' in *Environmental Politics* Vol 2 No 2
- Westfahl, Gary (1992) 'The Gernsback Continuum': Gibson and the Context of Science Fiction' in (eds) Slusser, George and Shippey, Tom *Fiction 2000: Cyberpunk and the Future of Narrative* Athens Ga and London; The University of Georgia Press
- Westling, Louise (2002) 'Introduction' in (ed) Parham, John *The Environmental Tradition in English Literature* Aldershot; Ashgate
- (ed) Whittaker, Stella and Manchester City Council (1995) *First Steps: Local Agenda 21 in Practice – Municipal Strategies for Sustainability as Presented to Global Form Manchester 1994* London; HMSO
- Williams, Raymond (1997) 'Utopia and Science Fiction' in *Problems in Materialism and Culture* London; Verso
- Williams, Raymond (1993) *The Country and the City* London; Hogarth Press
- Wolmark, Jenny (1994) *Aliens and Others: Science Fiction, Feminism and Postmodernism* Herts; Harvester Wheatsheaf
- World Commission on Environment and Development (WCED) (1987) *Our Common Future* Oxford; Oxford University Press
- Wytenbroek, J R (1987) 'Always Coming Home: Pacifism and Anarchy in Le Guin's Utopia' in *Extrapolation* Vol 28 No 4 pp330-339
- Yearley, Steven (1996) *Sociology, Environmentalism and Globalisation* London; Sage