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## TOWARDS AN ECOLOGICAL POLITICAL ECONOMY

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One of the most vibrant fields of intellectual inquiry over the last twenty years has been the endeavour to understand the nature and impact of human interactions on the natural environment. This has occupied the minds of mainstream economists and radical social critics alike, and in the process there has been some quite significant recasting of the environmental problematic. The intellectual engagement with the natural environment has been moved by a determination to capture the complexity of environmental processes. There has also been considerable critical self-reflection within the dominant schools of thought. This has prompted a rethinking of the conceptual integrity of particular discourses in terms of their capacity to provide a foundation for understanding the nature of environmental problems or how this conceptual terrain could be extended. It has also generated more critical thinking on how best to respond to the environmental problems that are besieging humanity, and critical inquiry within Australia has been foremost in this.

The most immediate and obvious way in which this rethinking is evident in the new language that now frames debate on the environment among economists and political economists. The (natural) environment has been eclipsed by such notions as *natural capital* and *ecological systems*. The efficient utilisation and allocation of finite environmental resources as the basis for maximising economic welfare has been subsumed within the broader objectives of *economically sustainable development* and *ecologically sustainable development*. Debates on economic interactions with the natural environment have thus been framed by the purchase of different conceptions of the natural environment.

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In large measure the momentum of this intellectual engagement has been propelled by the rise of environmentalism as a political force. Indeed, environmental movements throughout the world have been a driving force in focusing the concerns of economists and political economists on the seriousness of global environmental problems. Moreover, insofar as environmental movements have criticised dominant conceptions of the environment and questioned the adequacy of established policies to deal with environmental problems, environmentalism has influenced the trajectory of the intellectual engagement with the natural environment. In turn, the different conceptual and theoretical developments, and their sway in policy making or in informing corporate strategies, has provided new intellectual ammunition for environmental movements, influencing the shape of their political interventions.

These developments present the political economist with a three tiered challenge. Any radical engagement with the environmental problematic must firstly address the salience of mainstream economic theory because it has dominated approaches to environmental management policy making. This requires the political economist to acquaint her/himself with the neoclassical economic principles that are the foundation of the mainstream theory and the changing emphases within that theory. This is necessary as a first step in questioning the integrity of the theory and, as a corollary, for critically evaluating the particular policies it informs. It also provides a basis for considering the particular interests that might be advantaged by these policies and evaluating the effectivity of the policies.

Secondly, if political economy is to be more than just a critique of the mainstream environmental economic theory and its application, it must articulate the conceptual or theoretical vantage point from which it formulates these critical reflections. The critique should be both self-reflective and inform alternative, more sustainable paths for organising our interactions with the natural environment.

Thirdly, if the engagement of political economy with environmentalism is to be one of substance, it must be more than an intellectual excursion through competing paradigms. The intellectual task must also have a political edge to it so that it engages with environmentalism politically. A political economy of the environment should look towards identifying

and critically engaging with the social forces that can create the transformations necessary for effecting a sustainable future.

The making of the political economy of the environment is thus best regarded as a multifaceted project. In outlining the parameters of this project, this survey draws two distinctions based on two relatively distinctive bursts of energy in the endeavour of economists and radical social critics to engage with the natural environment. The first focuses on the initial endeavours to conceptualise the nature of human interactions with the environment and how this informed policy formulation on the one hand and underscored radical critiques of capitalism on the other. The second examines in a little more detail the more recent and reflective critical engagements that have been based around more dynamic conceptions of the natural environment and which have informed more broadly-framed strategies for reducing environmental problems. In concluding, I will consider the relative influence of these different approaches and how this has reflected and impacted on the political momentum of environmental movements in Australia.

### **The First Wave: Mainstream Environmental Economic Theory and Radical Critiques**

The first serious and critical engagement with conceptualising the natural environment in economic and social theory occurred during the 1960s and early 1970s when the first-wave of environmental campaigns and struggles swept the advanced industrial world. Two particular responses were discernable. One, formed within mainstream economic theory, sought to extend its theoretical purview to inform the development of policies to redress environmental problems. The second, framed within radical discourse, contended that environmental problems were systemic to capitalism.

One of the most telling inspirations for this intellectual engagement was the publication in 1962 of Rachel Carson's *Silent Spring* which revealed the degradation and the health risks for farm workers associated with more intensive petrochemical-based modern agricultural techniques. The

publication of *The Limits to Growth* in 1972 provided further ferment, helping to ignite a number of radical critiques of the damaging environmental effects engendered by capitalism. Some of the more important contributions drew upon a Marxist tradition. These identified the resource depletion and pollution consequent upon the expansion of mass production and the more expansive scale of capitalist production, the over-utilisation of natural resources and waste associated with the periods of overproduction, and the costs of the energy-intensity of capitalist production. Moving beyond a productionist focus, some interventions singled out the advent of consumerism as a contributing factor in the dramatic increase in resource utilisation, and others the automobile age as an exaggerated form of this. Most of these critiques were concerned with documenting concrete examples of environmental degradation. They contributed to the mounting evidence that justified the concerns about the state of the environment and, in the process, helped to maintain the political momentum of environmental movements throughout many of the advanced industrial economies of the world.

Meanwhile, it was to the emerging theory of environmental economics that planners turned to in order to inform the formulation of policies for managing the environmental challenge. The premise of environmental economic theory was that environmental problems, and most notably problems of pollution, and to a lesser extent resource depletion, were the result of 'market failure'. Perhaps the most well-known rendition of this thesis was Garrett Hardin's 1968 essay "Tragedy of the Commons", positing that the commons was over-exploited because the market had failed to price and thereby ration access to it. Economists represented the dominant problem as that of *externalities*, the incidental effect of production (or sometimes consumption) activities which were to be regarded as an *economic problem* because these external costs were not reflected in the actual market cost or price of the product. These were economic costs borne by the individuals, or the community generally, not directly involved in the production that generated the externalities. They were a cause of concern to the environmental economist because, not being reflected in decisions within the market, they resulted in a less than efficient utilisation and allocation of resources, manifest in the erosion of the whole society's economic welfare. The solution proffered was to somehow ensure that these costs were incorporated into economic

decision-making. This contention became embodied in the 'polluter pays' principle – a principle that was to be enshrined as the core of OECD environmental economic management policy.

The practical effects of this were to either require that the cost of externalities should be reflected in production costs and therefore prices or that those suffering the economic effects of externalities should be compensated.<sup>1</sup> Thus, the distinctive feature of this first wave of mainstream environmental economic theory was that it endorsed the state as a pivotal institution in the resolution of environmental problems. This interventionist, or *command-and-control*, approach appeared to provide a constructive panacea for managing many of the environmental problems identified by environmentalists. This posed somewhat of a dilemma for neoclassical economists generally predisposed towards minimising the role of the state relative to the market. A compromise was found in environmental 'fine-tuning' whereby government policy was limited to re-aligning market prices through various environmental taxes, subsidies and arrangements or the payment of compensation.

Arguments in support of the intervention of the state presented those within the burgeoning field of political economy with a rather different paradox. The political economists' research emphasised that the nature of environmental problems is systemic to capitalism, but the theoretical focus of this engagement had not developed sufficiently to inform a conclusion as to the adequacy of such state intervention. Thus, although antithetical towards neo-classical economic theory in general, the radical critique was not necessarily at odds with the environmental economists' advocacy of *command-and-control* remedies (Wheelwright 1974). Political economists could have drawn on debates on the capacity of the state to reconcile, or alternatively ameliorate, other contradictions within capitalism, such as that in the capital-labour relation, in order to develop the critique, but by and large this did not happen. While some of the more radical elements with the environmental movement remained reluctant to place too much confidence in the effectiveness of state

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1 A milder version of the theory on the optimisation of economic welfare in the context of externalities held that victims of pollution did not actually have to be compensated but rather that there was a capacity to pay the compensation.

intervention, the first wave of the political economic analyses of the environment held back from taking the lead from these elements to develop a more broadly theorised critique. This would await a later generation.

### **A Second Wave: Theorising Ecologically Sustainable Development**

A second burst of intellectual interest in environmental problems was prompted by the mounting global concern with the magnitude of environmental degradation and resource depletion. This interest became more concentrated in the 1980s, cemented by the 1987 Brundtland Commission Report (the United Nation's World Commission on Environment and Development), as attention turned towards a shared appreciation that more than piecemeal strategies had to be formulated if the problems were to be adequately addressed. As with the earlier interest, this was propelled by environmental activism, a second wave of political activism that was evident throughout much of the world.

This renewed interest has been more critically and intensely focused than in the earlier rush of efforts to conceptualise the character of environmental problems and their resolution. The critique of the conventional economic analysis has been particularly sustained. Interestingly, within the academy this has resulted in a direct challenge to the hegemony of the neo-classical economic foundations of environmental economics. The concern with to what are perceived as fundamental shortcomings in the mainstream economic analysis has stimulated efforts to articulate an alternative conception of the nature of human interactions with the natural environment. Adopting a more pluralist and intellectually fluid approach, a fresh branch of environmental economic discourse has emerged under the umbrella of *ecological economics*. As this has been formulated, ecological economics tends to provide the basis of liberal critiques and social democratic or reformist management strategies. There have been some important Australian contributions in the evolution of this focus (Hare 1990; Zarsky 1990a, 1990b, 1990c; Commons 1995; Diesendorf & Hamilton 1997).

The foundations of ecological economics were rooted in the research undertaken within the physical sciences on the limits to economic growth. Among the first efforts to articulate this was the liberal economist Kenneth Boulding's representation of the market economy as a 'cowboy economy', ever expanding and occupying and overwhelming the natural frontiers. Georgescu-Roegen drew more systematically from the science of physics, expanding upon the *Law of Thermodynamics*, to argue that economic activity was a process that would necessarily result in the dissipation of finite natural resources. These ideas were taken up by Australian political economists in the development of critiques that emphasised the systemic nature of environmental problems (Wheelwright's lectures in first year Political Economy at the University of Sydney were a case in point).

The more explicit formulation of an approach called ecological economics occurred in the wake of the Brundtland Commission report. This was a reaction against the representation of the environment within mainstream economics as simply the sum of a discrete collection of resources and an incidental backdrop to economic activity. Although ecological economics is not premised on a singular philosophical foundation in the way that mainstream environmental economics is, there are some recurring premises that justify the label. This includes recognition of the uniqueness of the constituent elements that go into the making of ecological systems, and the integrity and sustainability of ecological systems as being contingent upon the dynamic interplay of these elements. Individual components cannot be regarded as if they are readily substitutable for one another or readily substituted by human-made commodities. Environmental management is thus transformed into a matter of developing policies to maintain the integrity of ecological systems as a whole, to ensure the complexity of the system, maintaining biodiversity, and avoid the cumulative impositions on ecological systems that impede ecological functions. Moreover, because ecological systems are regarded as being dynamic, the notion of 'management to achieve an economic equilibrium' is jettisoned. It has been these general objectives that have become encapsulated in the idea of ecologically sustainable development, although this has not remained the monopoly of ecological economics.

The management challenge taken up by ecological economics, often represented as *green economics*, was exhibited in the contributions to the Commonwealth government's ecological sustainable development policy formulation process during 1990-91. Peak non-government environmental organisations were invited to contribute to this process, and in a very short space of time ecological economics became their *liefmottif*. At this point in time, ecological economic theorising was still comparatively underdeveloped, and this was evident in the articulations of ecological economic thinking in Australia (Hare 1990; Zarsky 1990a; 1990b; 1990c). Interest in ecological economics has since grown, with an Australian chapter of the International Association of Ecological Economics being formed.

The most obvious distinguishing feature of ecological economic theory is that the economy-environment problematic is inverted so that ecological sustainability becomes the primary objective. Equally significant, although by no means as systematically developed, is the conceptual break from the neo-classical economic tradition with the rejection of subjective preference theory. This has been moved by a number of considerations. The most noteworthy include:

- the folly of defining material well-being in terms of individual welfare maximisation as this is secured through the market place;
- the difficulty of reconciling notions of individual welfare maximisation, defined almost wholly in terms of consuming more goods and services, with the policy objective to limit consumption;
- the inability of a system of unregulated exchange to proscribe the overexploitation of environmental resources; the unrealistic expectation that market prices will reflect damaging environmental problems;
- the unfeasibility of prices adjusting in anticipation of the over-exploitation of a particular environmental resource, or of pollution levels that exceed the assimilative capacity of an ecological system, and in such a way as to restrain or preclude any further exploitation.

Rather than focus on celebrating the rationality of the individual, ecological economists have shifted the focus to that of the necessity for

economic communities to secure their material and therefore their ecological future. This has prompted reflections on the need to rethink the institutional mechanisms that would facilitate these goals. It has stimulated interest in charting new ways of organising the economy and society. In the process ecological economists have stressed that it is only by securing the social and material integrity of communities that ecological sustainability is at all possible. Accordingly, effective strategies will require checks on the unfettered force of the market. Notions of community and ecological stewardship are privileged in place of notions of individual freedom. Of further interest to debates within political economy, some ecological economists have addressed the scope of economies, often advocating the desirability of economic autarchy in opposition to globalisation.

Yet, for all their strengths and insights, ecological economic approaches reproduce many of the limitations that political economy critiques have identified with the mainstream analysis. This is evident in the retention of some of the liberal principles of the mainstream, such as the notion of the individual's right to exercise economic freedom, defending the merits of an economic system that is based on rewarding individual effort and innovation with material rewards. The problem with this is that the bounds of this freedom cannot be defined without compromising the principle that informs it, and this in turn compromises any notion that limits should be placed on consumption. The ecological economic approach is also problematical in the way it advocates regulating access to environmental resources. The regulation of access cannot avoid the necessity for establishing the relative importance of resources in order to determine which will be exploited and which preserved, and there is really only one unambiguous measure of value – and that is the money, or price, form. Unless the allocation of, and access, to environmental resources is to be administered, the mechanism for valuing then simply reinstates the market as the institutional vehicle for regulating access to the environment. The practical methods that are presented for operationalising green economic management thereby tend to reproduce many of the inherent shortcomings of environmental economic theory.

A further dilemma has arisen because of the narrow focus of policy prescriptions advocated by ecological economists. This narrowness is

largely a result of the endeavour to offer a practical counter to mainstream environmental economic policies that, as we shall see, have become dominated by the neo-liberalism preoccupation with unregulated markets. Much of the energy of ecological economics is framed by the ambition to provide more appropriate policies than those offered by mainstream environmental economic theory. The centre of gravity of the ecological economic policy options thus tends to be set in reaction to the parameters of the existing policy framework and to what is practicable within this framework. The consequence is that, while the policy prescriptions are imbued with green economic principles, they largely set aside the other larger questions raised by the ecological economics critique. The recasting of economic policy becomes the primary objective of ecological economists' interventions, and the more grandiose mission which calls for social and political transformations are turned into idealist complements. Communitarianism and the politics that would inform this become relatively incidental in the ecological economic project. It is this preoccupation with the application of (economic) policy that diminishes ecological economics and distinguishes this discourse from the more self-consciously defined political projects of the radical critiques.

### **Radical Interventions on Ecology**

The determination that has impelled the emergence of ecological economics as a distinct field of intellectual inquiry has also propelled some serious critical reflection among radical social theorists. In many respects, the direction of development has been quite similar to that of ecological economics, concentrating on articulating an appreciation of the natural environment in terms of its complexity and diversity, and likewise therefore embracing ecology rather than environment, as well as advocating the necessity for social and political transformation as an essential ingredient in economic transformation. The different radical social theories of feminists, Marxists and their anarchist adversaries have sought to develop an appreciation of ecology as an integral element of their respective theoretical visions. This has been very much an introspective process, with considerable reflection and interrogation of

their respective theoretical traditions. But it has also been driven by a rivalry to establish a pre-eminent position within the emerging radical green discourse.

The shift in thinking within radical social theory is evident in the adoption of distinguishing nomenclature: eco(logical)-feminism as distinct from radical and socialist feminism; socialist ecology or eco-Marxism as opposed to environmental Marxism; and social ecology as this is articulated by critics working within an anarchist tradition. Australian social theorists, and especially those working in the disciplines of philosophy, political science and sociology, have assumed a prominent place in this development, providing a solid reference point for a political economy seeking to engage with the ecological concerns (Eckersley 1992; Fox 1990; Plumwood 1993; Salleh 1997; Walker 1994). The radical ecology position of 'deep ecology' has also been progressed by important Australian contributions (Fox 1990; Plumwood 2002).

The distinguishing feature of the radical critiques is their claim that, because the erosion of the integrity of ecological systems has systemic origins, strategies based on reforming the management and organisation of contemporary economies will be neither adequate nor sufficient. Each of the radical critiques points to the limitations of the reforms advocated by ecological economists and environmental economists.

A common theme running through each of the radical critiques is the necessity for a transformation in the power relations structuring human interactions with the natural environment. The projection of an ecologically sustainable future emerges out of and is informed by the more critically developed theoretical critiques of the political economy itself and the place of humans in the natural environment. Eco-feminists, for example, focus on the necessity for abolishing patriarchal relations as a necessary step in reinstating the intimate subjective connections among people and with the natural world. Socialist ecologists stress the necessity for supplanting capitalist modes of production organised on the basis of the alienation of direct producers from, and the objectification of, nature and which are propelled by the imperative for expanded accumulation. Social ecologists reiterate these concerns, but postulate that the degradation of the global ecology is attributable to more than just

capital and to a broader array of power relations. On this reasoning, the emancipation of humanity must be linked to the development of an ecological sensibility in which an evolving ecological stewardship becomes a guiding principle. Deep ecologists emphasise the idea of ecological crisis being reflective of a cultural crisis that can only be resolved when individuals develop a more self-confident sense of their self, their interconnectedness with others and with nature.

These radical social critiques place considerable stress on the revitalisation of civil society and the strengthening community. This is not dissimilar to the ecological economists' claim that enhancing the sense and authority of communities will provide a more effective social and material foundation for sustainable development.<sup>2</sup> However, the radical critics take issue with the notion that ecological sustainability is simply a matter of reorganising economic communities because sustainability must also be built on cultural and political transformations. The inequitable power relations that generate environmental problems are not really addressed in the ecological economic scenario, and the radical critiques point to the necessity to abolish such inequities. Moreover, the building of an ecological future is not simply a question of establishing the integrity of individual communities. Radical critiques, and especially those undertaken by socialist ecologists, move beyond the 'local' to the 'global' to focus attention on the importance of the panorama of relations across communities, and to take up the question of the global inequities with respect to the control of environmental resources and the differential impositions on the global ecology.

Perhaps most importantly, the radical interventions have also sought to inform a radical politics that moves well beyond appeals for policy formulation based on the principles of ecological sustainability. The radical intellectual engagement with ecology is thus also a political

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2 Ecological economists, such as Herman Daly, argue that the formation of smaller, more self-sufficient communities will be doubly beneficial. It will have the advantage of reducing the scale of economic activity, and thereby reduce pressures on the environment. Smaller communities will connect people more closely with the natural environment they inhabit so that they will be better placed to see the physical effects of rapacious economic behaviour and more likely curb their impositions on the natural environment (Daly & Cobb 1989).

project. This should not, however, be dismissed as simply an idealist venture. One of the interesting shifts in the radical engagement with the environment is the intellectual energy that has been invested in efforts to inform a progressive green politics. Building on the critique of the limitations of the notion of sustainable development, socialist ecologists have advanced the idea of justice and the environment. This is founded on developing critiques that help to inform strategies for progressing social justice (or distributive justice) and has been integrally linked to more critical consideration of intergenerational, international and inter-species dimensions of justice (Low & Gleeson 1998). Rather than reflect on the idea of sustainability in an introspective manner, the engagement with the politics of ecological or economic sustainability has become more outward looking and critical.

This engagement, especially insofar as it has helped to inform a green politics, has also sought to break through that great dichotomy that has historically permeated socialist discourse – the opposition of the social democratic advocacy of reform and the radical critics' call for the abolition of capitalism (or patriarchy or hierarchically structured societies in the case of feminists and anarchists). In the context of a claim to ensure biological diversity and ecological sustainability, the meaning of sustainability has been broadened to embrace social and economic sustainability as being essential for ensuring an ecological future. This has led to a redefinition of the problematic, often posed in terms of securing justice across the global political economy. This claim is integrally linked to the argument for empowering communities and the development of institutional mechanisms, locally and globally, in order to effect a more equitable distribution of global resources. The radical critique therefore seeks to move beyond mere lip-service to the notion of communitarianism.

This has radically changed the terms of the debate on the natural environment and thrown open political spaces for the broadening of the purview of environmentalism as a political force. This is a shift that is exemplified in the ways in which green political parties throughout much of the world have supplanted leftist parties as the champions of a range of social justice issues. The focus on social justice has also prompted greens to address more directly the question of capital and capital

accumulation. A strategy premised on taking control of the economy and re-embedding and subordinating economic processes in society would have the effect of subjecting capital to social control and abolishing the force of capital accumulation as the defining element in exchange relations.

The distinctive feature of the radical embrace of ecology as a political project is that it has also prompted some consideration of the likelihood that ecological crises will throw up social forces. Such forces are regarded as more than a mere reaction to the degradation of the environment. They may also give voice to strategies and transformations aimed at addressing, if not resolving, the crisis. The radical interventions have sought to articulate ecological crises as engendering the conditions for socio-economic change. Perhaps the most exciting of these approaches is James O'Connor's articulation of the idea that capital accumulation engenders not only economic contradictions but other contradictions, including those that propel social movements' concern with environmental issues. This is in line with the traditional Marxist view that systemic contradictions ignite a range of political reactions that seek to bring about a resolution (O'Connor 1988). O'Connor's formulation of the notion of the *second contradiction of capitalism* draws upon Marx and Polanyi to develop an understanding of ecological crisis that embeds the political foundations of environmentalism in the contradictory character of capital's relationship to the natural environment. What forms the basis of the *second contradiction* is that capital draws upon natural resources as if these are produced as commodities and, in the process, over-exploits the resources and thereby undermines the natural conditions of capitalism. This can prompt opposition to environmental degradation on a number of fronts: one is to be found in the emergence of the environmental movement as a political force focused on regulating access to natural resources and protection of the environment; another may be based on the state regulating the conditions of capital's access to natural resources; while a third may entail capital acting in consort with other capitals, or in conjunction with the state (or simply the state acting in the interests of capital in general), to manage and regulate capital's interaction with the natural environment. The environment thus becomes the object of political

engagement as the *direct* result of the contradictory character of capital accumulation.

The distinctive feature of the teleology that O'Connor charts is that it is not determinist. The momentum and direction of the political engagement around the environment should not be taken as a given. The politicisation of the environment is a product of contestation. It reflects how environmental problems are brought onto the political agenda, and the different ways of conceptualising the source as well as measure of environmental problems. It reflects how the calls to redress environmental problems are often linked to the advocacy of particular strategies for remedying the problems. These interventions are necessarily informed by different ways of conceptualising or theorising the environment. Moreover, the effectiveness of the interventions will be influenced by the dominance of particular ways of conceiving of the environmental problematic. This is most obviously illustrated by the universal acceptance of the notion of ecological sustainability within environmental discourse.

However, recognising that the environment is a political subject, subject to contestation, does not in practice automatically enhance the hegemony of the radical intellectual tendencies. The contest is played out in concrete political outcomes, and the reality is that radical agendas have been totally eclipsed by policy formulations that are informed almost wholly by mainstream environmental economic theory. O'Connor's intervention provides a vital reminder of the necessity that the task of theorising the nature of environmental problems and their resolution is more than an academic exercise.

### **The Hegemony of Neo-liberal Environmental Economic Theory**

The great paradox of the surge of liberal and progressive interest in the ecology is that mainstream environmental economic theory enjoys an unparalleled dominance in informing the shape of policies designed to manage our interactions with the environment. In very large measure this can be attributed to the remaking of environmental economic theory.

As mainstream economic theory has embraced the free market as the most appropriate institutional instrument for ensuring the efficient allocation and utilisation of resources, so environmental economic theory has followed suit. Mainstream environmental economic theory has been refashioned to stress market-based solutions to environmental problems, to using *economic instruments*, contrasting with the earlier emphasis upon state regulation and intervention in markets. This, of course, sits more neatly with the contemporary dominance of neo-liberal economic ideologies and policies.

The refashioning of mainstream environmental economic analysis has occurred largely in response to the sustained critique of the earlier emphasis of the conventional approach to environmental management and its instrumentalist characterisation of the environment. The intellectual legitimacy of environmental economists was being questioned from within the economics discipline, by ecological economists, and from beyond by radical social theorists and environmentalists. Demonstrating a linguistic – and ostensibly conceptual – malleability, two noticeable shifts of emphasis feature in how environmental economic theorists have responded to this sustained critique.

The first response has been to formulate a more dynamic conception of the natural environment and the value that people place on the environment.<sup>3</sup> The question of valuation has prompted recognition that the market cannot capture the different ways in which people value particular attributes of the natural environment. This in part follows

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3 There are several strands to this critique. The mainstream theory's treatment of 'externalities' as aberrations, rather than ubiquitous features of economic processes, was clearly deficient given the widespread reach and cumulative effect of environmental problems. Insofar as the theory treated natural resources as discrete elements, and the problems that arose as a result of their over-exploitation, the mainstream environmental economic approach was held to be essentially instrumental. The capacity of the market-based remedies to anticipate the cumulative and inter-connected consequences of environmental degradation and resource depletion was also questionable. A further criticism has questioned the relevance of the idea that the optimisation of economic welfare, through the efficient utilisation and allocation of resources, is necessarily consonant with the maintenance of the natural environment.

from an appreciation of the limitations of the market, insofar as the market does not provide an institutional mechanism for rationing access to 'public goods' (the 'tragedy of the commons' problem). It also follows from the recognition that the market does not always provide the medium through which environmental preferences can be expressed (such as the intrinsic value that people place on fauna or flora, or ecosystems, which they have no intention of wanting to buy in the market place). The new mainstream environmental economics seeks to address these shortcomings by proposing proxy means for signalling such preferences. These would provide measures of the value placed on the option to exploit or protect a particular resource that may be enjoyed by the consumer. Alternatively, they could provide an estimate of the value that resides in the existence and protection, the intrinsic value, of an environmental resource.

The second and bigger conceptual leap is embodied in setting aside the idea of the environment as an inanimate bundle of discrete resources and taking up the notion of *natural capital*. The macro economic management objective then becomes one of maintaining some minimum aggregate stock of natural capital, rather than simply focusing on securing a number of discrete components of the environment as distinct management goals. This is also being portrayed as the new 'green economics' because it provides a broader purview of the environment whilst continuing to emphasise the merits of ensuring the efficient allocation and utilisation of resources and maximising efficiency in economic interactions with the environment. It holds out the promise of sustainable economic development and this is equated with sustainable ecological development.

The promise of this new greener economics to deliver both economic expansion and ecological sustainability is premised on the efficient allocation and utilisation of resources, which in turn is contingent upon the market being comprehensive. This confidence in the market to ration access and capture all valuations of environmental resources has transformed environmental management into an instrument for privatising environmental resources. It turns constituent elements of the natural environment into commodities, so that they can be exchanged at a

price, thereby ensuring that their exploitation and consumption is rationed efficiently.

This new approach to environmental economics has considerable intuitive appeal. Premised on the operation of the free market, it provides the opportunity for individuals to express their preferences for the natural environment, something individuals cannot readily do when the state is regulating interactions with the natural environment through *command-and-control* techniques. At the same time a market-based management regime promises to deliver sustainability alongside maximum economic advantage. It has institutional appeal in that it requires the removal of regulatory obstacles that could foreclose access to particular environmental resources and thereby frustrate economic expansion. Above all, the new environmental economics is 'capital friendly'; it seems to diminish the role of the state in regulating capital's access to natural resources and, indeed, expands the horizons of accumulation by transforming these resources into capital. It is for these reasons that capital has invested so much in promulgating the merits of the mainstream environmental economic theory and the policy regime that it informs.

There is, however, one fundamental oversight with the neo-liberal preoccupation with free markets. None of the markets advocated can be established without the state's imprimatur. The 'capitalisation', the institution of property rights of the various natural elements drawn from the natural environment, can only be established through the authority of the state. So notwithstanding the rhetoric of market liberalism, the existence and operation of the 'free market' as the preferred instrument for securing ecologically sustainable development remains wholly contingent upon the institutional force of the state.

The ascendant position of mainstream environmental economic theory in defining policy has to be regarded as one dimension of the triumph of neo-liberalism. The triumph has been a central ingredient in capital's engagement with environmental management. Interestingly, some leading peak organisations within the environmental movement in Australia have entertained the advantages of working within this paradigm. Partnerships with corporations, which some of these organisations would previously have treated as demonised adversaries,

have emerged as one striking aspect of this political accommodation. So too has the guarantee of electoral support for the election of the conservative Coalition government, in return from a government commitment to devote some of the proceeds from the partial privatisation of Telstra to the regeneration of the environment.<sup>4</sup>

Needless to say, these political about-turns have occurred in response to the inability of the environmental movement to progress more radically informed agendas. They also speak volumes for the urge for political survival, and about the marginalisation of liberal and radical discourse from the political process.

### Conclusion

The multi-dimensional nature of political economy's engagement with the environment is essential. If the making of a political economy of the environment is to be true to the object of radical discourse, it must once again confront the dominance of policies justified in terms of mainstream environmental economic theory. This has to be founded on challenging the intellectual veracity of that theory.

The political economy project requires both an understanding of the nature of the conceptual and linguistic turn that has added the environment to the neo-liberal agenda and an appreciation of the inability of market-based policies to secure a sustainable ecological future. But this is also a political exercise because it entails exposing the interests that the mainstream environmental economic theory serves. And the task of this making of a political economy of the environment does not end here. In elaborating the different liberal and radical social critiques that point to the systemic nature of environmental problems, political economy cannot simply limit its oeuvre to a comparison of different paradigms. It must offer some sense of the social forces, their make up

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4 This was all the more amazing because it was obvious that the Coalition would substitute recurrent funding for the environment with the one-off revenue injection from the Telstra sale. Moreover, the dedication of funds to the environment was channelled into heritage projects some of which had nothing to do with the natural environment and more to do with 'pork barrelling'.

and organisation, which can progress the resolution of the contemporary economies' assault on the natural environment. That may also require a more critical engagement with environmental movements. It certainly requires a reinvigoration of the radical project to provide new reference points for environmental struggles, and for the political force of environmentalism more generally. It can thereby contribute more directly to securing more sustainable modes of organising socio-economic systems.

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