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The Environmental Crisis and the Accounting Craft

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If the purpose of environmental accounting research is to develop, suggest and analyse ways out of the environmental crisis, then it is fundamental that the ethical positions informing our research are developed and explored fully before we make choices about the path and direction of our own work. This paper reviews two alternative approaches to environmental ethics, namely, radical ecology (of which deep ecology, social ecology and eco-feminism are regarded as sub-divisions) and the emerging area of postmodern environmentalism. The aim is to encourage environmental accounting researchers to consider and explicitly state the ethical position adopted within their work.

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Abstract

If the purpose of environmental accounting research is to develop, suggest and analyse ways out of the environmental crisis, then it is fundamental that the ethical positions informing our research are developed and explored fully before we make choices about the path and direction of our own work. This paper reviews two alternative approaches to environmental ethics, namely, radical ecology (of which deep ecology, social ecology and eco-feminism are regarded as sub-divisions) and the emerging area of post-modern environmentalism. The aim is to encourage environmental accounting researchers to consider and explicitly state the ethical position adopted within their work.

Introduction

There are many terms for the deep greens - deep or radical or social ecologists, ecological humanists (and all the shades of deep green ecogreens, value conservatives, visionary/holistic greens, red greens). In the end the ideas intended in the term will end in the usual tautology (Gray 1992, 405).

. . . ecological problems cannot be solved by simply tinkering with the attitudes and practices that generated those problems (Zimmerman 1994, 3).

Having sifted through a lot of the environmental accounting literature, there seems to be a significant oversight-the submerged, if not invisible, reference to 'environmental ethics' (see Table 1 for a summary of alternative ethical positions). It is heartening to see the emerging body of environmental accounting literature over the last 25 years (see Mathews 1997 for an overview of the literature) and increasingly researchers are prepared to consider some difficult technical and philosophical accounting possibilities and limitations. Yet, a review of the comprehensive list of environmental and social accounting research summarized by Mathews (1997) illustrates the apparent lack of direct engagement with the 'environmental ethics' literature that has emerged within philosophy, science and technology studies and sociology over a similar period. Environmental literature as it appears in sociology, science and technology, and philosophy is generally marked by very different approaches to the 'why, how and what for' in regard to nature, including deep ecology, social ecology, eco-feminism and post-modern environmentalism. Environmental accounting is beginning to reflect this diversity and it is important that environmental accountants and researchers are familiar with its contents. This requires researchers to remain alert to the possibilities that may be emerging in environmental ethics and theory.

Table 1 - Reference guide to environmental ethics

General approach	Summary of ethical position
Mainstream Accounting	<p>Generally assumes the environment to be an 'externality' and not a direct responsibility of the organization. Ethical responsibilities are extended to a limited group, which includes shareholders as primary stakeholders.</p> <p>This perspective allows for an ethical position founded on the maximization of personal utility, often in the form of profits and often at the expense of the long term viability of the natural environment.</p> <p>If the environment is considered, it is often done so from the perspective of the organization's interests.</p> <p>Anthropocentric; centred around humanity and decisions are made in the interests of humans over the interests of other living organisms. If environmentally sustainable behaviour is encouraged, it is done so on the basis of human interest.</p>
Deep Ecology	<p>Ethics based on non-anthropocentric belief systems.</p> <p>Cultural practices are placed in the context of a greater living cosmos and decisions are assessed in light of the effect on the broader living organism of which the self is a part.</p> <p>Often encourages a spiritual dimension within the ethical framework and draws on the teachings of indigenous and Eastern philosophy to help inform relationships with nature.</p>
Social Ecology	<p>Ethics based on non-hierarchical relationships among people and nature.</p> <p>Cultural practices are challenged to become egalitarian and promote equity and move away from oppressive relationships of domination.</p> <p>Recognises social and environmental relations are affected by power Structures and encourages these relationships to allow for self-determinism and encourage the maximization of nature, community and self potential.</p>
Eco-feminism	<p>Encourages an ethical perspective that challenges patriarchal structures that have often equated women with nature.</p> <p>Challenges social and environmental relations to become more inclusive of the 'Other', which includes women, nature, the poor and people from non-European backgrounds.</p> <p>Offers a sophisticated analysis of gender and the role of these relations in the oppression of nature, suggesting an inclusive environmental ethic informed by 'Other' perspectives that resist the domination of patriarchal social relationships with nature.</p>
Post-modern Environmentalism	<p>An emerging area that resists absolutes as a way out of the environmental crisis.</p> <p>Encourages a dialogue with cultural, gender and class 'difference', and offers an analysis of language, text and discourse in the construction of the environmental crisis.</p> <p>It is an ethical perspective that encourages a re-imagination of nature as a site of multiplicity and multi-vocality and offers visibility and validity to environmental perspectives that have been excluded or erased from the main texts that dominate both mainstream environmentalism and debate.</p>

The purpose of this paper is to offer a short overview of some of the movements within environmental ethics, suggesting some of the insights that these could offer towards further development of what we have come to describe as 'green accounting'. I will specifically deal with two alternative areas of environmental discourse, 'radical' approaches (in the form of deep ecology; social ecology and eco-feminism) and the emerging area of 'green postmodernism'. The aim is to offer environmental accounting researchers an introductory framework for environmental theory and to call for a more visible and overt discussion of 'environmentalism' and our ethical positions. This requires an awareness of the possibilities and

responsibilities associated with ethical choices if we consider ourselves to be advocates for the 'environment'. [1] To relegate such a debate to the margins of our more hopeful, technical developments is a grave mistake. Without clear articulation of our 'broader' environmental positions we are liable to ignore the serious ecological implications and limitations of the cultural practices of account keeping/constructing (Lehman and Tinker 1987; Arrington and Francis 1989; Cousins and Sikka 1993).

It is also important to clarify what I mean by accounting within this work. Accounting is seen to be a professional discipline and a critical social science (Dillard 1991) having the capacity to construct social realities (Hines 1988) and also to manifest social and environmental change (Cousins and Sikka 1993). The boundaries that have traditionally defined accounting within its purely technical reporting function have come under challenge extensively within the literature and increasingly we are viewing accounting as a craft that offers visibility to certain realities whilst erasing others. Part of the environmental accounting project in general has been to expand the function of accounting to incorporate environmental concerns, and this needs to occur in both the technical and philosophical spheres that surround the cultural practice of accounting. As such, accounting is not considered to be a neutral practice free from context, but rather a dynamic site in which a complex matrix of power relations effects the way the we respond to the social and environmental issues that face our communities (Cousins and Sikka 1993).

Another important motivation for this paper is to challenge environmental accountants to directly address the 'reasons' behind our choice to research and engage in environmental discourse and to acknowledge the 'ethical' positions we take explicitly or implicitly within our work. It is hoped that this will expose some significant ethical issues that construct our research, informing the specific positions that we take as 'reformist', 'radical' or 'anywhere in between' accountants. [2] It should be noted that all categories and spectrums of thought are problematic, as they can be both misleading and easily manipulated to serve purposes outside the intent of the author. However, for the purposes of this work it should be made apparent that I am interested in provoking serious philosophical, ethical and political contemplation that encourages a path out of the ensuing environmental crisis for all stakeholders, which includes present and future generations across the spectrum of species. The way that we do this will vary and researchers should choose a position that they see as meeting the objectives considered to be most pressing, whilst remaining in line with their own ethical position.

This paper is divided into categories and these categories are not closed to contest. However, for ease of consideration I have utilized what may be seen as 'ideal types'. [3] These inevitably overlap and conflict and it is not my intention to suggest that environmental accounting scholars should not challenge the boundaries that are constructed in this work or the categories that have dominated environmental theory as it appears in the academy more broadly. The structure of this paper is as follows; firstly, I will consider what is meant by ethics in a broad sense, to offer added insight into the discussion that follows; secondly, the paper will be divided into a discussion of radical ecology (deep ecology, social ecology and eco-feminism), outlining the basic theory, some of the criticisms and its potential relevance to environmental accounting; thirdly, some of the emerging literature in postmodern environmental

ethics, some criticisms and also the possibilities for environmental accounting research within this context will be considered.

Ethics and the environment

In a society in which the narrow pursuit of material self interest is the norm, the shift to an ethical stance is more radical than many people realize (Singer 1995, 277).

The above quote by Singer (1995) suggests that thinking and acting ethically is more radical than we may first assume and if taken seriously in the development of our research choices some very different approaches may emerge--ones that are not only more harmonious with the self, but also more in line with the aspirations we have for our communities and natural environments. As this paper is specifically concerned with the ethical considerations facing environmental accountants, it is important to clarify the central position of ethics within this paper. Defining ethics is an impossible task and one that will inevitably lead to contradictions and conflict if it is considered universal and generally applicable across context. Having said this, ethics has been broadly defined as:

(t)he branch of philosophy that investigates morality and, in particular the varieties of thinking by which human conduct is guided and may be appraised (Bullock and Stallybrass 1977, p. 214).

And in specific relation to environmental ethics, Holbrook wrote that:

(t)here are two principles often found in environmental ethics, self-realization and environmental preservation (1997, 87).

Traditionally ethics was thought to offer a guide between right and wrong, good and bad, praise and blame, virtue and vice. Such assumptions beg multiple questions as to whether there is a 'right' or 'wrong' way to behave in regard to the environment? Is it bound by context, influenced by class, ethnicity and gender? Is it constructed by culture and the artefacts of culture, such as, the legislature, religion and government? Does it have a constructing effect on these cultural artefacts? How do the layers of our ethical development from the structural influences raised above combine with the profoundly personal influences to create an ethical position that informs the development of our responses to complex political, social, economic, environmental and ontological issues? On these points Weston wrote:

Ethical ideas, in particular, are deeply interwoven with and dependent upon multiple contexts: other prevailing ideas and values, cultural institutions and practices, a vast range of experiences, and natural settings as we11 (1995, 223).

We can obviously occupy a multitude of spaces within the spectrum of ethical possibilities, it is also possible to occupy more than one at a time. Although it is important to acknowledge that ethics is not considered to be a statement of fact, but to be fluid, contextual, dynamic, and oftentimes contradictory, it would also be misleading to suggest that ethical frameworks cannot guide personal and public action in very clear and influential ways. [4] For the purpose of this paper, ethics can broadly be considered to be that which informs and guides action, from the founding assumptions that we utilise to inform our work to the aspirations and goals of that work. It is this consideration of ethics that will inform our theory choices, ontological assumptions, politics, aspirations, and actions.

Environmental endorsement? Radical ecology and the explicit articulation of an environmental ethic

Radical ecologists usefully reveal the social and ecological wrongs committed in the name of progressive modern worldviews. Many radical ecologists believe that the ecological crisis stems from the fact that modernity's proponents have simply assumed that human emancipation and well-being can be achieved only by somehow 'mastering' the natural world (Zimmerman 1994, 7).

Radical ecology is an umbrella term for a variety of different perspectives that call for a radical change in the assumptions that underpin the human / non-human relationship by confronting 'the illusion that people are free to exploit nature and to move in society at the expense of others, with a new consciousness of our responsibilities to the rest of nature and to other humans' (Merchant 1994, 1). It challenges us to reconsider the presumption that 'some level of material and cultural existence has been attained that is indeed worth sustaining' (Luke 1998, 197) and brings to the fore the need to consider alternative ethical, theoretical and political frameworks.

It is apparent that there is only a limited amount of 'green accounting' literature that engages the possibilities of more 'radical' environmental perspectives. [5] This may indicate a number of things, one of them may be the implicit acceptance of the sustainable development or reformist approach [6] to accounting for environmental issues; secondly, it may be indicative of a broader academic tendency towards pragmatism; and thirdly, it could also implicitly assume an ethical perspective that ties our relationship with nature to the prevailing discourses of economics (there has been significant discussion of these issues, see for example, Wambsganss and Sanford 1996, Gibson 1996, Lehman 1996, Milne 1996, Verburg and Weigel 1997, Beder 1998, Luke 1998). Certainly there is significant tension between what has emerged as the dominant trend in environmental theory, [7] and the more radical possibilities that are still struggling to garner validity and acceptability (see Lehman 1999). It is perhaps here that a serious consideration of the ethical perspectives that inform our work will challenge the dominance of environmental reforms to cultural practices and encourage more radical possibilities.

Although accounting may be dominated by research that proposes 'reforms', it would be misleading to suggest that there is no literature that has considered more 'radical' environmental possibilities. A number of accounting researchers have engaged with the complexities of 'environmental ethics' discourse, including Hines (1991); Maunders and Burritt (1991); Cooper (1992); Gray (1992); Gallhofer and Haslam (1996); Birkin (1996); Lehman (1996; 1999) and Neu et al (1998). However, in very few of these explorations into the possibilities and limitations of green accounting is there a detailed examination of the particular ethical position that informs or has the capacity to inform further inquiries. So, in this section I wish to explore the possibilities and limitations of radical ecology, divided into three categories (for ease of consideration): deep ecology; social ecology and ecofeminism. [8] The purpose is to encourage a move away from the a priori assumption of individualism encouraged by advanced capitalist societies and provoke contemplation of other ethical possibilities that may be more environmentally conscious and sensitive.

Deep ecology: anthropocentrism and the environmental crisis

Deep ecologists such as Arne Naess (1972), have called for a radical reconsideration of the 'sustainable development' approaches that were beginning to gain currency in environmental, government and business circles in the 1970s. Naess (1972) claimed that there was a need to rearticulate our relations with nature in order to dispel and destabilise the mechanistic world view manifested within scientific methodology over the last 300 years (also see Merchant, 1980). Central to the thesis of deep ecology is the belief that the environmental crisis is the outcome of the anthropocentric humanism that is central to the leading ideologies of modernity, [9] including liberal capitalism and Marxism. The concept of anthropocentrism, its consequences and alternatives, are the focus of deep ecology, as it attempts to unmask anthropocentrism as an environmentally hazardous legitimating ideology. This challenges an inscribed discourse that permits and encourages an attitude that relates all action to a 'what's in it for us' question. If 'we' are the resounding feature of environmental action (we'll save it/destroy it because it'll make us more money, more comfortable, or more satisfied) then either way the broader concerns of nature as a legitimate and intrinsic site of importance are obscured. The ethic that underpins deep ecology is one that encourages us to reconsider the assumption that humans have the right to determine the future of all other living species using their own needs as the basis for that judgement (refer to Gray, 1992, for an analysis of this within the accounting literature). In short, deep ecology has been defined as:

. . . the view that we ought to extend moral consideration to the entire biotic community either (a) by extending to all living elements of the community the right to live and flourish or (b) by regarding the biotic community itself as the primary object of moral regard (Cheney 1987, 116).

As a result of the anthropocentric bias attached to reformist environmentalism (or 'pragmatism' as Salleh, 1984, described it), deep ecologists reject the possibility that the market can 'correct' mis-use and mis-allocation of nature and the institutionalized separation of the human experience from that of the non-human world. This fundamentally challenges the privileges afforded ideologies of 'progress' and 'development' that have marked the age of modernism. [10]

In the words of Zimmerman (1987):

Not surprisingly, deep ecology is a controversial view. Some regard it as utopian and naive; others as promoting a kind of fascism / totalitarianism that would sacrifice human life for the 'good' of the biosphere; still others argue that it remains anthropocentric since it still regards human beings as different from all other forms of life (1987, 37).

As Zimmerman (1987) suggests, deep ecology is controversial and has been plagued by a number of criticisms. Some have come from the ecofeminist camp, arguing that deep ecology does not make explicit its stance on gender and should make it clear that patriarchy plays a pivotal role in the domination of nature (Salleh 1992, Slicer 1995). Perhaps the most serious criticism is that deep ecology is unable to transcend its position as anthropocentric, as it is created by humans, and applied to the experiences, of not just humans, but all entities (Hayward 1997, Eckersley 1998). It begs the question: can we speak for nature and if we do choose

to, can we claim that we move away from the central position that humans have occupied within dominant thought? As Fox (1989) wrote:

In practice, however, deep ecologists, like everyone else, can fail to realise the full implications of their own principles (1989, 8).

It should be remembered that, although deep ecology may be criticized and fall short of its ambitious project, it is not meant to provide a strict code of conduct with which we should abide. Instead it is 'only intending to advocate a general orientation' (Fox 1989, 6) and in regard to this aim, deep ecology manages to develop an ethical position that radically addresses philosophical, political and theoretical issues that surround the domination of nature.

Although this perspective may not articulate a clear, short-term path out of the environmental crisis that environmental accounting researchers can adopt and directly apply to their work, it does fundamentally challenge the reformist assumption that dominates much environmental work within accounting. As a result, deep ecology asks significant ethical and philosophical questions to be drawn into focus when considering 'environmental' issues, even if this is not the ethical stance that we choose. This position encourages a move away from an ethic of self interest and anthropocentric humanism and encourages the development of an ethical position in which the self is re-imagined as part of a massive living organism, adjusting the ethical decisions that we make in light of this repositioning.

As these philosophical underpinnings suggest, ideologies of 'environmental management' that have gained privilege within much environmental debate in environmental accounting are fundamentally challenged. For example, there is much sustainable development literature like that of Batley and Tozer (1993) and Geno (1995), disclosure based research like that of Freedman and Jaggi (1988), Belkaoui and Karpik (1989), Owen (1992), Adams et al (1998) and Neu et al (1998); and environmental audit research like that of Elkington (1990) and Tozer and Mathews (1994). This is by no means an exhaustive list, but it is indicative of the bias towards more pragmatic research choices that operate within the established framework of accounting, whilst not fundamentally challenging its underlying assumptions-and it certainly does not challenge the anthropocentric bias that has dominated most environmental accounting. This can be contrasted against a comparatively small amount of literature that has engaged with environmental ethics, theory and philosophy (Hines 1991, Cooper 1992, Gray 1992; Lehman 1999). [11]

Perhaps the closest that environmental accounting has come to a consideration of deep ecology, is the work by Hines (1991) entitled 'On Valuing Nature'. Although Hines (1991) does not directly identify with the philosophies of deep ecology, she does challenge the traditional anthropocentric way of viewing nature within accounting scholarship. Her work encourages environmental accountants to challenge the foundational assumptions that maintain nature at arms length and, in doing so, the line between 'nature' and herself is blurred sufficiently in order to challenge the anthropocentric humanist assumptions that dominate accounting for nature. She wrote:

It seems to me that the best thing that I can do for nature, as a person who is an 'expert' in financial accounting-speak, and thus its limitations, is to speak of my love of

nature; to call attention to the limitations of the planetary-wide financial accounting language, and to make an issue of refusing to speak of nature in the language of numbers (Hines 1991, 29).

Accounting scholars who see validity in deep ecology and its principles may see possibilities in the development of literature that draws on the ethics of resistance, deconstruction and (re)imagination, rather than the process of 'correction' via accounting. It also encourages accounting scholars to move away from determining nature's value from an anthropocentric perspective and encourages an understanding of 'intrinsic' value as a valid and important means of addressing environmental issues.

Social ecology: hierarchy, domination and the environmental crisis

Industrial development has brought neither social justice nor a healthy environment for all people. . . People working together can create opportunities to keep their own environments clean and remove neighborhood poverty (Merchant 1992, 133-4).

Unlike deep ecologists, social ecologists (Callicott 1987 1989, Bookchin, 1982 1990) do not seek to destabilise anthropocentrism, and instead of holding the belief that this is central to the perpetration of environmental misuse, it is claimed that the environmental crisis should be seen in the light of hierarchy and domination. The ecological crisis is seen as the result of authoritarian structures, in which people are subjugated, whilst the natural world is pillaged for prestige, profit and control. The call to preserve nature is directly related to the need for humans to recognise that their own lives are intricately bound up in the environmental decisions that they make, and as a result anthropocentrism is not directly challenged. Relations of domination are considered unique to human civilizations and also pivotal to social and environmental patterns of inclusion and exclusion, privilege and underprivilege, visibility and invisibility. [12]

Social ecology is a broad term and unfortunately this kind of categorization does not reflect the diversity and contestability that exists within the literature. It should be pointed out that there is a great diversity of literature, some of which is closely attached to Marxist theory, [13], others are more closely described as libertarian-socialist or anarcho-communitarian [14] (Bookchin 1994), and still others draw on Eastern spiritual and cultural traditions in an attempt to develop an ethic that is harmonious and holistic, rather than oppressive and dominating (Schumacher 1974). It is undeniable that the movement is heavily influenced by Marxist theory and the ecological limitations of Marx are addressed within this body of work as it is generally accepted that he neglected to consider the environment in his emancipatory aims. Central to this ethic, is the desire to find viable ways to resolve the contradiction between production and ecology. According to Bookchin et al (1990), the inequities that are apparent in our social relationships are the same as those that are inscribed on our environmental relationships. They wrote that:

. . . there is a historical tie-in between the way people deal with each other as social beings and the way they treat the rest of nature.. .our eco-problems are fundamentally social problems requiring fundamental social change (Bookchin et al 1990, 110).

Social ecology attempts to align the goals of non-hierarchical social structures, redistribution of wealth and removing widespread global poverty, with the goals of environmentalism. To 'actualise' this vision requires fundamental changes to

patterns of population growth and consumption, ownership and control of assets or 'environmental resources', private property rights, human rights, access to services and employment opportunities and would not be fulfilled without a revolutionary change to the current ideologies and ideological apparatus (Althusser 1971) of liberal capitalism.

This requires a vastly different conceptualization of social structures than 'sustainable development' paradigms suggest, as it implies a shift away from cultures of consumption, to cultures that focus on the equitable and sustainable distribution of natural resources. As capitalism traditionally splits 'the worker' of the land from 'the owner', it is suggested that neither are motivated towards preservation, both are disembodied from an intimate recognition of the importance of nature to the life process and the long term capacity to satisfy the material needs of humanity. As an environmental ethic, it is a far-reaching stance that calls on us to contest authoritarian structures (particularly liberal capitalism) that 'ignore man's (sic) dependence on the natural world' (Schumacher 1974, 36).

Social ecology as an ethical position avoids a serious trap of modernity by contesting the assumption that humanity is the master of nature and that humans have the right to dominate other humans. As such, it is an ethical position that challenges ethics of individualism supported by capitalist systems. It encourages us to reconsider the role of hierarchies, social structures and political organization such that these are essentially egalitarian, libertarian and oriented around the meaningful participation and recognition of all members of the community and not just the privileged. However it does not transcend the dualistic thinking that has denoted modernism and social change is theorized in terms of domination and freedom. Whether this is a limitation or not depends on the stance one takes on modernity, on one hand it can be associated with the very oppression that social ecology attempts to subvert and on the other with a period of rapid social change with liberating potential. More importantly, there are some direct criticisms of Bookchin's (1982) work on social ecology. Although Bookchin (1982) correctly acknowledges that an ecologically sensitive society can be socially oppressive, he fails to see that the reverse is also true and that 'it is possible for a relatively egalitarian society to be extremely exploitative ecologically' (Fox 1989, 15).

Deep ecologists criticise this approach because it predominantly focuses on renegotiating relationships with nature along economic and social lines, and does not call for spiritual or philosophical changes in our attitudes towards nature. Nature is seen as a 'resource' and humans maintain their position as 'environmental managers', but under this approach it is the inequitable nature of this environmental management that is at the heart of the environmental crisis. The institutional structures that have perpetuated 'environmental management' along the lines of short-term self interest, individuality and exploitation are the focus of the social ecology agenda and they actively seek to overthrow these structures in favour of 'environmental management' that invokes community, equity and long-term collective responsibility. Ecofeminists criticise this approach because it fails to consider the social construction of gender differences and the role that patriarchal discourses of domination have played in the environmental crisis. Social ecologists have also been criticized for their lack of direct consideration of the way an anthropocentric philosophy of social justice will be environmentally sensitive and open up paths out of the environmental crisis. Fox wrote that social ecologists:

. . . insist far too much that there is a straightforward, necessary relationship between the internal organization of human societies and their treatment of the nonhuman world (1989, 16).

Accounting has often been described as a cultural practice (Chua 1986; Arrington and Francis 1993; Hines 1991; Hopper, Storey and Willmott 1987) and as an instrument of social control by Marxist oriented accountants (for example, Tinker et al 1991; Tinker 1991; Cooper 1992; Neimark 1990; 1994) and as a socially constructed/constructing tool by others (Arrington and Francis 1989) and as such, social ecology could appeal to some environmental accountants seeking to radically re-imagine a more emancipatory 'culture'. This would require different 'cultural practices' that acknowledge the role that accounting plays in the distribution of resources, whilst keeping in view the importance of nature as a social space. Social ecology encourages us to actively participate in the decolonising of nature and people from the impact of industrialized, capitalist economies motivated by profit and founded on ideologies of growth, consumption and development. As an alternative it offers a theoretical framework that encourages equity, interdependence and community.

Accounting could play a unique role in supporting the ethical desires of social ecology. It is possible to re-imagine the accounting craft as a means of distributing resources evenly, rather than as an instrument associated with wealth maximization and economic rationalism as it currently stands. It is also possible to imagine accounting as an itinerary of shared wealth in which detailed information about the distribution and well-being of nature is recorded. This would require a fundamental shift from the dominant language of finance that currently operates within mainstream accounting discourse, and as such it is worthy of further consideration by environmental accounting scholars.

Eco-feminism: androcentrism and the environmental crisis

Mechanical theories of the world developed in the 17th century represented Nature as passive and female: she was seen as a set of discrete functioning mechanisms that could be controlled and also exploited, and that exploitation was legitimated through the images of conquest, violation and penetration which constituted scientist's claims to know Nature (Rose 1993, 69).

Eco-feminism is the name given to a growing body of literature that combines theories of feminism with those of ecology and takes issue with the fact that both women and nature have been equated in much patriarchal discourse. Merchant (1980), traced the history of nature images / metaphors and compared them to the images / metaphors of women that have dominated historical texts, investigating the similarities associated with their subordination and discursive invisibility. This is described as the outcome of a 'logic of domination' that pervades the discourse of patriarchal cultures, and under such a system, notions of rationality, culture, and science have been privileged, to the exclusion and absence of other ways of formulating 'knowledge'.

Like deep ecology and social ecology, ecofeminist theory has emancipatory goals, but the perspective claims that the structures of patriarchy need to be recognized as the major source of oppressive technologies, ideologies and practices and that they are implicated in the domination of nature, women and also the domination of men

that do not identify with the traditional white, property owning stereotype (minority cultures, indigenous peoples and issues of race and poverty are not excluded, see Cheney 1987, Zimmerman 1987, Salleh 1992, Slicer 1995). Salleh (1992) wrote that eco-feminism combines the focus of environmental ethics on 'man's relations to nature'; the focus of socialism on 'man's relations to man'; with the concerns of feminism being 'man's relations to woman', expressing a synthesis of the emancipatory aims of all three. As such, eco-feminism is not specifically about women, but more accurately about the systems of domination that are invoked by patriarchy. This is summed up in the following quote as it suggests that eco-feminism focuses on:

. . . unravelling the conceptual roots of an exploitative white male dominant multinational corporate system that continues to take the integrity of other life forms away (Salleh 1992, 205).

Eco-feminism has emerged as a separate approach to environmental ethics because other perspectives have neglected to engage in a sophisticated analysis of gender and the role that patriarchy plays in the marginalization of nature. As women have traditionally been unable to access public debate, they have been excluded from playing a legitimate role in the development of social structures and the 'ethic' that informs them. As women have not played an equal role in the construction of social structures, political discourse and morality, eco-feminists suggest that the experience of women is worthy of close consideration and is fundamental to any serious attempt to understand the cause of environmental abuse (Warren 1987). Cultural practices such as accounting, could be seen to manifest specific sites of material well-being to the exclusion of an equitable distribution of wealth and the long-term health and diversity of nature. Zimmerman (1987) wrote:

Most feminists would agree, however, that a major source of contemporary social and environmental ills is the fact that patriarchal culture has, on one hand, repressed and devalued the female experience and, on the other hand, has both absolutized and universalized the male experience (1987, 24).

Just as contemporary feminism(s) varies a great deal depending on the location of the particular issue, for example, culture, geography, religious / spiritual beliefs, eco-feminism is also diverse. It draws on the differences that women or more accurately feminism(s) [15] (which does not exclude the contribution of men), can contribute to re-articulating the way that we live within the world. Eco-feminism also reflects the ontological and epistemological diversity that has emerged within broad feminist debate (such as liberal, socialist, Marxist or postmodern feminism). Although feminist theory is marked by diversity, ecofeminist theory maintains a level of consensus surrounding the patriarchal origins of both the domination of women and nature. It is argued that:

. . . an eco-feminist ethic offers a critique of male domination of both women and nature and an attempt to frame an ethic free of male gender bias . . . Eco-feminism builds on the multiple perspectives of those whose perspectives are typically omitted or undervalued in dominant discourse (Warren 1990, 151).

However, a number of criticisms arise within the literature about other ecofeminist positions, it is not possible to do justice to these complicated issues here, but a review of Warren (1987) clearly outlines the points of divergence and convergence within and across ecofeminist positions. Certainly the most serious criticisms are

levelled at eco-feminists that focus purely on issues of gender and do not include a specific analysis of class and ethnicity. Although this emerged as major problem within early ecofeminist literature, it is now relatively accepted that it is 'simplistic on both empirical and logical grounds to think that one particular perspective on human society identifies the real root of ecological destruction' (Fox 1989, 15).

As eco-feminism challenges the very foundations on which cultural practices and structures are built, accounting from this perspective may be viewed as a craft that legitimises both the misuse of nature and patriarchal systems of domination. As accounting maintains a faith in what have been perceived as masculine traits in patriarchal culture (objectivity, scientific methodology, reason, truth), from an ecofeminist perspective, accounting plays a role in maintaining the validity of this perspective to the exclusion of other ways of viewing accountable relations.

Cooper (1992) is perhaps the only accounting scholar who has attempted to negotiate the complex space between feminism, environmentalism and accounting. In doing this she opens up and legitimates the possible insights that environmental accounting scholars could gain from this perspective-she does this, however, without direct mention of eco-feminism. Perhaps this perspective is not 'pragmatic' in the sense that it does not seek to offer short term 'solutions' but it creates a forum in which the role of accounting within cultures of domination, can be debated. In developing the feminist notion of multiplicity and Otherness, Cooper (1992) concludes that accounting is a reductionist practice and is inadequately equipped to represent the multiplicity of nature. She claims that environmental accountants should consider the philosophical and theoretical implications of their desire to 'account for' the environment.

Environmental scepticism?: green postmodernism

Post-modern culture is characterized by a suspicion of coherence (Care 1995, 108). It is apparent that no universal Western perception of nature exists. People can hold many independent impressions of nature, depending on culture, experience, context and scale (Soper 1995, 138). Post-modern environmental ethics is a loose term for an emerging body of literature and it is one that has directly taken up issues of representation and discourse as 'environmentally' important. The three radical ecology positions outlined previously are predominantly concerned with notions of intrinsic worth, environmental truth and redefining 'morality' such that the environment is offered a visible place in our moral codes. They remain unconcerned with questions of representation, conceptuality, the role of language and the discursive 'play' that mediates, constructs and changes our relations with nature. Green postmodernism is a movement that has similarities with 'radical' ecology, as both seek to question Western models of progress, development and growth; expose the oppressions associated with faith in scientific methodologies, epistemologies and ontologies; and they both implicate Western rationality (grounded in the tradition of the Enlightenment) for the current conceptual culture / nature split and the colonization of nature in all of these approaches (Soper 1995, 1996, Jagtenberg and McKie 1997). However, they differ in significant areas.

Post-modern approaches to the 'environmental crisis' focus attention on the discourses of nature, representations of nature, and destabilising essential or

universal claims to 'know' nature in any singular or absolute language. As Zimmerman (1994) wrote:

. . . we never encounter nature either in itself or as a whole; instead, nature is always contested within particular, local discourses. . . the fact is that language irrevocably splits humans from the world, word from object, desire from desired. The challenge is to live playfully and affirmatively, minus nostalgia and regrets, without a center that allegedly transcends the ceaseless play of language (1994, 139).

Post-modern environmental ethics is an ethical position that celebrates difference and engages dialogue with marginal discourse, offering them visibility and validity. This does not necessitate a total rejection of dominant discourse, but does seek to expose the potentials of other discourses to elaborate and (re)inform the boundaries that have existed around debate. This is an approach that questions a number of the underlying assumptions that we have come to assume as transcendent ontological or epistemological properties. It is here that the diversity of 'postmodern' approaches challenges scholars to reconsider the role of language, discourse, text, signs and symbols within the development of environmental analysis and the multiple and contesting environmental ethics that underpin this (Cheney 1989, Jagtenberg 1994, Gare 1995, Manes 1995, Soper 1995, 1996). The ecocentric or Marxist/Socialist approaches to liberating and emancipating nature are seen to be further attempts to essentialise and universalise 'knowledge' with a different point enjoying the privileges of centrality (eco as opposed to anthro) (Cheney 1989).

The period of modernity has encouraged us to think in terms of a 'common' denominator, be that science (some that all nature can be reduced to science) or a manifestation of scientific methodologies in disciplines such as economics or accounting in which nature is reduced to universal disclosures, within a universally acceptable language. To assume this is possible, is to assume that the specificities of nature can be reduced to a singular language that enjoys dominance. Cheney (1989) wrote that:

. . . the effect of totalizing language is to assimilate the world to it . . . contextual discourse reverses this . . . (it) is not fundamentally concerned with issues of overall coherence (1989, 120).

This creates a significant challenge to the cultural practice of accounting as it has tended to assume that the environment can be adequately represented in its dominant language of finance and numbers, or within the dominant discourses of objectivity and truth claims irrespective of the matrix of power that operates not only through the practice of account keeping but also within the theories that underpin it. Postmodernism places this assumption under scrutiny by considering the possibilities and desirability of objective and 'true' representations of nature within cultural practices. Accounting as a cultural practice should not be excluded from these challenges and it is foreseeable that the 'Other' things that are necessarily excluded in its representations are (re)considered. For example, environmental accountants may support representing nature as an asset in the accounts, and this would necessarily mean that nature as a site of spiritual contemplation is excluded; it also requires that nature be given a financial value and this would leave its intrinsic value absent from the accounting language. This example could be extended, but the point is that postmodernism allows us to expose the context that has remained obscured by the neat, scientific processes that we have come to accept as the most 'reasonable' approach. It also allows researchers to expose the

'Other' possibilities that have been relegated to the margins in order to maintain the veneer of 'absolute truth' that underpins and is fundamental to the ideologies of modernity.

Postmodernism is concerned with opening up the possibilities of language and representation, so that new possibilities are allowed in the ontological and epistemological assumptions that underpin modernity and the cultural practices that have arisen through the ideologies of modernity, such as accounting. This challenges the possibility that 'nature' has an ultimate or absolute definition and that 'nature' has a scientifically or economically determinable 'value' that exists independent of the language used to describe and name it. This is marked by an investigation into multiplicity and is in direct contrast to the simplicity that has dominated Western metaphysics. Nature is not considered to be the signifier that transcends the process of language and holds a place as essential and absolute; and is not considered to be a singular source and ground for 'truth' but as a site of multiplicity and contextual subjectivity (Soper 1995, 1996).

Just as discourses of 'nature' are considered to be multiple and discursively mediated, Jagtenberg (1994) and Jagtenberg and McKie (1997) suggest that it is important to view the environmental crisis as more than material, but also discursive in content. They wrote:

. . . we delineate the decline of nature both environmentally, as a potential catastrophic biospheric event and discursively, as interlinked with social theories, communication discourses, and cultural practices (all of which have material force) (1997, xi).

The challenges facing 'environmental' researchers are considered to be bound up with the complexities associated with postmodern disjunctures, fractures, specificities and inter-textualities that have traditionally been excluded from the discursive representations of the environment (Cheney 1989, Frodeman 1992, Manes 1995) [16]. It is possible to interpret this ambiguity as an argument for clarity, which accounting could provide. Alternatively, it is possible to see the argument for clarity as a reduction in the complexity that surrounds environmental realities, and that tools such as accounting ignore the difficulties of geography, cultural traditions, gender and religious or spiritual specificities in regard to nature. This is an ethical position that considers nature to be more than an economic commodity to be traded on the free market and attempts to recognise different discourses of 'nature' as a resistance to dominant discourse and as a way of destabilising the certainty that surrounds 'nature' and its uses within dominant discourse, indicating the significant differences in meaning that are dynamic and diverse not only across cultures, classes and genders, but within these. Jagtenberg (1994) suggested that the discursive tools that allow us to separate nature from cultural practices (such as capitalist economies; consumption; development; growth; accounting) need to be deconstructed, exposing nature as a vital abstraction in order for systems of profit to sustain themselves. He wrote that: . . . this is a very important escape act, because as long as consumption can be separated from the ecological consequences of production, profit margins will stay up (Jagtenberg 1994, 17).

Post-modernity is offered as a way of placing 'nature' within the complexities of discursive contest and contextualising it within specificities of contemporary cultural practices, such that the development of environmental ethics does not ignore the

process of representation in postmodern cultures (from cinema; to literature; to hyper-real shopping malls with fake plants; to natural theme parks; to the balance sheet). Nature is considered in its contesting imagery, (re)productions and (re)presentations, rather than only in a 'traditional' sense as an uncontested and objective 'reality'. To do so necessarily fragments discussion about nature and exposes some of the flaws of totalising discourses of science and specifically accounting. Jagtenberg (1994) wrote that: . . . the 'naturalization' of nature occurs as nature and the environment are commodified and recirculated as image, sign, myth and product (1994, 23).

As the split between nature and culture becomes blurred and fragmented from a postmodern perspective, nature cannot be assumed to offer an uncontested transcendental signifier around which social structures can organise. The meaning of 'nature' is seen as complex and in a state of flux, it is opened up such that it resists and subverts cultural practices that rely on its tamed and controlled definition, in order to exploit it, which is an important contribution to 'new' environmental ethics (Worster 1995). It should be noted that a definition of nature does not have to mean exploitation and oppression, it is when nature as a site of multiplicity is reduced to a universal representation and transcendental signifier irrespective of cultural, class or gender then issues of oppression, violence, and exploitation are pressing, relevant and vital to environmental research, and particularly postmodern environmental ethics as it attempts to consider the importance of language and discourse along with cultural, geographical, spiritual, gender and class difference.

This is an area that needs further exploration in the accounting literature, as it seeks to destabilise the underlying assumptions that have played significant roles in constructing oppressive relations with nature. It may give some accounting researchers a language in which to explore discourses of accounting and accountability as they are played out and challenged both within accounting literature and in broader more public discursive spaces (for example, media, cinema, public policy). Such an approach fundamentally challenges the ontological and epistemological grounding that accounting (and other cultural practices) have enjoyed. Postmodern environmental ethics significantly contributes to the development of language(s) that could be utilized by those of us who are attempting to expose the tensions and ruptures associated with the expression of nature within the terms of accounting. In doing so, there is an opportunity to expose some of the flaws in the dominance of financial language as a way of mediating our experiences and decisions about the future of nature-it also has the potential to challenge the location of 'environmental ethics' within green accounting research.

This approach is not without limitations, and can be accused of depthlessness, nihilism and thwarting the emancipatory aims of theorists seeking change through solidarity. Postmodernism does not suggest an answer to the crisis of modernity, it does not propose a singular path out of the issues that face a rapidly changing cultural, political and economic landscape, and as a result it could be accused of allowing for the sort of unabashed individualism that appears at odds with the aims of social and environmental justice. Like all the aforementioned theories of environmentalism, the environmental accounting scholar needs to weigh up the possibilities and limitations of the approach that they adopt. The following quote by Gare (1995) articulates the tension that environmental researchers face in a

postmodern environment. He wrote that: . . . when measured against the environmental crisis they are totally inadequate. Both revisionists of mainstream culture and Marxists are more adequate at this task. Nevertheless, the post-structuralists have revealed what kind of cultural politic to avoid if the causes of the environmental crisis are not to be reproduced by efforts to overcome it (Gare 1995, 2-3).

Conclusion: the challenge of environmental ethics

Green accounting researchers are faced with a number of ethical/philosophical possibilities and need to consider seriously the possibilities and limitations of the approaches that they adopt. We can choose to adopt the sustainable development approach that dominates environmental discourse across disciplines (including science, politics, sociology and disciplines such as accounting) or one of the alternative perspectives outlined in this paper. We have the choice to adopt the non-anthropocentric position offered by deep ecology, a non-hierarchical position such as social ecology or the non-patriarchal position as is offered within the ecofeminist literature. Alternatively, environmental post-modernism encourages a deconstruction of the dominance of certain ethics over others, and attempts to allow for validated discursive space for different cultural, gender or class positions. Green/environmental researchers need to articulate their ethical perspectives clearly, because 'being green' does not denote a homogenous set of ethical and research values-instead it is a heterogeneous site of political differences.

Having outlined some of the main perspectives that are being developed in the broader environmental literature, it is posited that environmental accounting researchers need to become familiar with the complexities of these perspectives in order to formulate their own 'ethics' after a fuller understanding of the ethical possibilities being developed within the literature. This project is ambitious and this paper is best described as a humble inquiry into the possible environmental ethical positions that could inform the direction of future accounting research and practice. Each of these needs to be explored in much more detail and perhaps other researchers will take up this challenge in future environmental accounting literature. The lack of discussion of eco-feminism and post-modern environmentalism is apparent from the readings reviewed whilst writing this paper and it would be interesting to see their development and consideration in environmental accounting. There are many possible ways of viewing the environmental crisis, theoretically, epistemologically and ontologically and there is an apparent neglect of the more 'radical' considerations indicated in this work. Constructing a diverse body of environmental accounting literature is essential, not only as a way of addressing environmental abuse through the accounting craft, but also as a site of study in which new assumptions, imaginations and philosophies can play a leading role in helping to find a way out of the environmental crisis.

Endnotes

1. Of course, this is a very personal and politically sensitive issue. As accounting research has been dominated by 'objective', 'scientific' and 'empirical' research, it is perhaps not all that surprising that many researchers shy away from articulating themselves within their work. This being said, it is my belief that most participating in

environmental accounting discourse hope to abate the 'environmental crisis' at the very least and some hope to radically transform the philosophies that inform and construct our relations with nature.

2. Care should be taken here, as some radical positions on close inspection have conservative or reactionary tendencies, we only need look at the rise of New Right movements such as Hansonism in Australia, which could easily be considered radical, which do not necessarily reflect the intent of these categories. I gratefully acknowledge the comments of an anonymous reviewer in clarifying this point.

3. The notion of 'ideal types' as opposed to absolute categorisation was suggested by an anonymous reviewer.

4. It should be noted that "ethical codes could be deployed as an instrument of social domination" (Bauman 1993, 28) and should not be considered to be as simple as right and wrong, but also as a racio-political device that influences, persuades and constructs notions of 'right' and 'wrong'. Ethical codes should not be presumed to be neutral and apolitical.

5. Refer to Mathews' (1997).

6. Reformist approaches to environmental issues are considered to be those that seek to extend an already existing cultural practice, such as accounting, to include the environment. The results of which may be tangible and significant, however, the broader framework and assumptions of that cultural practice are not placed under critical examination. Sustainable development is an approach that does not make central to its project a radical reconsideration of our relationship with nature, or the questionable benefits of 'development', profit, and growth. It is considered reformist within this work, although this is not incontestable.

7. Theories of sustainable development have dominated environmental theory influencing the discourse of a diverse political spectrum from national and international policy makers, to corporations and to environmental organisations such as Greenpeace and The Wilderness Society (Beder 1998, Luke 1998).

8. I also wish to acknowledge that there are other movements such as spiritual ecology and political environmentalism that warrant investigation in another work, the three areas chosen are 'main' sub-sets of radical ecology. Here categories are not intended to be considered 'absolutes', instead they provide a framework for the development of the ideas within this work, but they are not incontestable and the lines that divide them are not as clear as work such as this may imply.

9. Modernity is considered to be an era in which beliefs in reason and rationality, truth and objectivity dominated debate, and the possibility of grand schemes of social reform dominated philosophical imagination. Although under challenge, the legacy of modernity lingers today and can be seen in the rigorous empirical research methodologies that dominate the development, analysis and research into social activities such as accounting. Modernity in environmental literature has been associated with the legitimisation of human domination of nature, the rise of science and mechanical metaphors of nature (Merchant, 1980). Such a perspective is gaining increasing acceptability within environmental scholarship.

10. Concepts such as emancipation and progress are interpreted differently across these categories and I thank an anonymous reviewer for drawing my attention to this. Perhaps 'progress' may remain a goal, but what constitutes progress may change-progress from this perspective may include a transition from anthropocentric decisions to eco-centric decisions.

11. This is not an exhaustive list, refer to Mathews (1997) for a comprehensive review of the literature.

12. It is important to recognise that hierarchical systems of domination, like those invoked by liberal capitalism, do not just create oppression and subjugation, they are also the systems that create oppressors and privilege. The development of an ethic of social ecology should be viewed from both angles, not just as a way of emancipating people and nature from oppression, but also toppling systems that create, maintain and allow privilege at the expense of nature and people.

13. " I recognise that this is a complex term, but it is used here as convenient way of raising egalitarian concerns that centre on issues of socio-economic class under capitalist systems of production. This is considered to be separate from the issues related to gender and ethnicity, however, social ecology does consider these in its broader response to hierarchies of domination.

14. These descriptions are offered because Bookchin's work advocates decentralism and cooperativeness and stands in opposition to all forms of hierarchy.

15. I am using the plural here to denote the diversity that exists within feminist debate. Just as there is no absolute definition of Woman, there is not a singular Feminism that captures this debate.

16. For example, what do we mean by nature and what is natural? What is it to preserve, conserve or sustain nature? What influences do advertising, media, cinema, literature have on nature and our discourses of nature? What is the influence of modern technology such as the internet, mass production, global market economies? How do these (as limited examples) cross-inform each other to construct and mediate our ideas about nature and the environmental crisis? Can it be coherent?

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