

## THE POWER AND PROMISE OF FEMINIST RESEARCH IN ENVIRONMENTAL EDUCATION

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I have been arguing for recognition of the absence and need for inclusion of women's perspectives in environmental education research and pedagogy for some time (see, for example, Greenall Gough 1993, Gough 1987b, 1999). In this paper I explore the related issue of the potential of adopting feminist research methods and methodologies in environmental education research. This exploration includes a discussion of the importance of developing a feminist perspective, the characteristics of feminist educational research, and a review of feminist research in environmental education. The paper concludes with a discussion of feminist poststructuralist research as a powerful and promising approach for future research in environmental education.

### INTRODUCTION

The title of this paper is a play on a significant article in ecofeminist literature, Karen Warren's (1990) *The power and the promise of ecological feminism*. I chose this title in order to be playful in the spirit of Patti Lather (1991), but as I started to put the paper together the playfulness became even more meaningful as it gave me the opportunity to relate Karen Warren's work to another significant author's. I found the beginning of a quote from Foucault in Patricia Duncker's (1996) recent fiction *Hallucinating Foucault* which seems to encapsulate (if Foucault can ever encapsulate!) my approach:

There *are* times in life when the question of knowing if one can think differently than one thinks, and perceive differently than one sees, is absolutely necessary if one is to go on looking and reflecting at all (Foucault 1990:8, my emphasis).

The need to change (decentre) the perspectives from which we think and perceive (and act!) is one of the foundations of environmental education. Hence I believe it is important to explore the potential of Foucault's writings, and others, for their relevance for environmental education. It should be noted that I quote Foucault in the context of this paper while recognising that several feminist researchers have drawn attention to the tensions between Foucault and feminism (from both positive and negative perspectives - see, for example, Diamond & Quinby, 1988; Gore, 1993; McNay, 1992 & Ramazanoglu, 1993). The power and relevance of Foucault's writing,

a type of thought strikingly attractive in its combination of extreme orderliness and brilliant intuitive insight, providing as it did an entirely new and excitingly different point of

view on familiar scenery  
(O'Farrell, 1997b:1),

is too great to ignore him - as the recent *Foucault: The Legacy* (O'Farrell, 1997a) indicates. This is a 780 page testament by 72 authors to the legacy of Foucault in fields as diverse as history, art, architecture, philosophy, psychoanalysis, feminism, medicine, government, management, public relations, environment, 'Third World', education and health.

The combination of the Foucault quotation and Karen Warren's publications is also opportune in the context of this forum because, contained within a collection edited by Karen Warren (1994), is an article by Phillip Payne criticising Karen Warren's article *The Power and the Promise of Ecological Feminism* for the inclusion of first-person narrative (Payne, 1994). From my perspective, first person narrative is one of the powerful aspects of feminist research - 'the personal is political' (Hanisch quoted in Humm, 1989:162) - as it provides the opportunity to consciously reflect and come to think and perceive differently. This phrase stresses the psychological basis of patriarchal oppression ... [it] makes a direct relation between sociality and subjectivity so that to know the politics of women's situation is to know women's personal lives (Humm, 1989:162).

Thus in this paper I argue for different ways of thinking and perceiving in environmental education research - by using feminist research strategies.

## WHY IS A FEMINIST PERSPECTIVE IN ENVIRONMENTAL EDUCATION IMPORTANT?

Developing a feminist perspective in environmental education is important because the vast majority of work in environmental education to date has been concerned with universalised subjects rather than recognising multiple subjectivities. It is time that we started to generate different ways of knowing and seeing environments in order that we might understand human-environment relationships better. As Brown & Switzer (1991:iv) argue, Women and men contribute to maintaining environmental, economic and social sustainability in distinctive ways. For women these contributions are made through:

- \* their public roles as the majority of the workforce in the health, education, welfare and service industries;
- \* their private roles as care-givers, farm managers, educators of children, and the principal purchasers of food and consumer goods; and
- \* the many public (paid) and private (unpaid) arenas where women have a major responsibility for the management of change and the transmission of social values.

Such a perspective is not intended to essentialise women as caretakers of the earth's household, obsessed with green cleaners, nor to cast women as symbols of nature. Rather, the intention in developing a feminist perspective in environmental education is to recognise the complexity of human roles and relationships with respect to environments, and that there are multiple subjectivities and multiple ways of knowing and interacting with

environments which cannot be encapsulated within the notion of universalised subjects.

Most importantly, by pursuing a feminist perspective in environmental education we will be able to construct 'less partial, less distorted' (Harding, 1991) accounts of environments. Such a pursuit is also consistent with feminist praxis - a term which recognises "a continuing feminist commitment to a political position in which 'knowledge' is not simply defined as 'knowledge what' but also as 'knowledge for'" (Stanley, 1990:15). It indicates rejection of the theory/research divide, "seeing these as united manual and intellectual activities which are symbiotically related (for all theorising requires 'research' of some form or another)" (*ibid*). Thirdly, it centres interest on methodological/epistemological concerns: "'how' and 'what' are indissolubly interconnected and ... the shape and nature of the 'what' will be a product of the 'how' of its investigation" (*ibid*). A central concern of feminist praxis is thus the reconstituting of knowledge. As Dale Spender (1985:5) argues, "at the core of feminist ideas is the crucial insight that there is no one truth, no one authority, no one objective method which leads to the production of pure knowledge". I therefore argue that through feminist research in environmental education we will be able to reconstitute knowledge about environments, and for environments.

Evidence that men and women do think differently about environmental issues is apparent in the data collected by Brown (1995). Table 1 below compares Australian women's priority concerns about the environment with a survey of issues prioritised in the scientific literature.

Table 1: Ranking of environmental issues by Australian women compared with the scientific-government agenda (from Brown 1995:3)

Women's ranking	Scientific/Government agenda ranking
1. Toxic wastes and waste management	(4)
2. Nuclear wastes and accident	(7)
3. Loss of animal and plant species	(10)
4. Poverty and its environmental effects	(8)
5. Land degradation and deforestation	(2)
6. Energy use and consumerism	(5)
7. War and militarism	(9)
8. Human population growth	(3)
9. Climate change	(1)
10. Misuse of technology	(6)

The different role of women with respect to the environment is also recognised in *Agenda 21*. However there is a lack of reciprocity between the "Global Action for Women Towards Sustainable and Equitable Development" and the "Promoting Education, Public Awareness and Training" chapters in *Agenda 21* (UNCED, 1992:Chapters 24 & 36 respectively). The *Women* chapter has as its overall goal, achieving active involvement of women in economic and political decision making, with emphasis on women's participation in national and international ecosystem management and control of environmental degradation. One of its objectives for national governments is:

To assess, review, revise and implement, where appropriate, curricula and other educational material, with a view to promoting the dissemination to both men and women of gender-relevant knowledge and valuation of women's roles through formal and non-formal education (UNCED, 1992:Paragraph 24.2(e)).

Other objectives addressed topics such as increasing the proportion of women decision makers, eliminating obstacles to women's full participation in sustainable development, achieving equality of access to opportunities for education, health *etcetera* for women, equal rights in family planning and prohibiting violence against women. The activities for governments related to such objectives are broadly concerned with achieving equality of opportunity for women (such as by eliminating illiteracy): increasing proportions of women as decision makers in implementing policies and programmes for sustainable development; and recognising women as equal members of households both with respect to workloads and finance. Consumer awareness is particularly mentioned, as are

programmes to eliminate persistent negative images, stereotypes, attitudes and prejudices against women through changes in socialization patterns, the media, advertising, and formal and non-formal education (UNCED, 1992:Paragraph 24.3(i)).

Here, women's contributions to society are being recognised and valued as something different rather than assuming that women will achieve equality simply through equal opportunity, although there are some elements of this liberal feminist view present.<sup>1</sup>

Unfortunately these views are not matched in the

"Education" chapter (36) of *Agenda 21*. Here women are generally included with all sectors of society, although specific mention is made in the objectives of the high illiteracy levels among women which need to be addressed (UNCED, 1992:Paragraph 36.4(a)). In the activities, women are mentioned in the following terms (UNCED, 1992:Paragraph 36.5(m)): "Governments and educational authorities should foster opportunities for women in non-traditional fields and eliminate gender stereotyping in curricula". No mention is made of recognising and valuing women's roles in achieving sustainable development, and the perspective seems once more to be that of liberal feminism, although indigenous peoples' experience and understanding of sustainable development is affirmed as playing a part in education and training (UNCED, 1992:Paragraph 36.5(n)).

There is a vast body of literature relating women and the environment, much too much to be listed here, although it is significant to note that the Australian Government published a statement on *Women and the Environment* (Department of Prime Minister and Cabinet/Office of the Status of Women 1992), and I do recommend Merchant (1996) and Salleh (1997) for an overview that does not approach the relationship with women as goddesses.

#### WHAT IS FEMINIST RESEARCH?

According to Lather, (1991:17):

to do feminist research is to put the social construction of gender at the centre of one's inquiry ... feminist researchers see gender as a basic organising principle which profoundly shapes and/or mediates the concrete conditions of our lives. Feminist research is thus openly ideological, aiming to correct both the invisibility of female experience and its distortion.

Feminist educational research methods take many forms, including statistical, interview, ethnographic, survey, cross-cultural, oral history, content analysis, case studies, and action research (as described in Reinharz, 1992). As Reinharz (1992:4) argues, "feminists have used all existing methods and have invented some new ones as well" and Stanley (1990:12) makes the similar point "that there is no one set of methods or techniques ... which should be seen as distinctly feminist. Feminists should use any and every means available".

According to Reinharz (1992:240), "feminist methodology is the sum of feminist research methods". In making this statement Reinharz emphasises a problem identified by Harding (1987:2) who notes, "that social scientists tend to think about methodological issues primarily in terms of methods of inquiry ... is a problem". Indeed, 'method' and 'methodology' are terms that are frequently either intertwined, used interchangeably or confused in feminist research scholarship, and contestation abounds as to whether or not there is a feminist research method or methodology. For example, Harding (1987:1) argues against the idea of a distinctive feminist method of research "on the grounds that preoccupation with method mystifies what have been the most interesting aspects of feminist research processes", in particular the differences between method, methodology and epistemology. Harding (1987:2) goes on to argue that it is new methodologies and new epistemologies that are requiring these new uses of familiar research techniques. If what is meant by a 'method of research' is just this most concrete sense of the term, it would undervalue the transformations feminist analyses require to characterise these in terms only of the discovery of distinctive methods of research.

The confusion between method (techniques for gathering evidence), methodology (a theory and analysis of how research should proceed) and epistemology (issues about an adequate theory and justificatory strategy) are not the sole province of feminist research. Such confusion abounds in non-feminist research too. In both feminist and non-feminist research 'method' is often used to refer to all aspects of research thus making discussion about distinctiveness, particularly in regard to feminist research, difficult.

Although Reinharz (1992:213) does not distinguish techniques for gathering evidence (method) from theory and analysis of how research should proceed (methodology), she does encapsulate an important aspect of feminist research when she writes that

feminist research is driven by its subject matter, rather than by its methods ... feminist researchers will use any method available and any cluster of methods needed to answer the question it sets for itself.

However, what makes feminist research distinctive, according to Harding (1987), is that it opens up

- \* new empirical and theoretical resources (women's experiences)
- \* new purposes of social science research (for women) and
- \* new subject matter of inquiry (locating the researcher in the same critical plane as the overt subject matter).

Although early feminist research was largely positivistic, recent methodologies have been more concerned with

generating and refining ... more interactive, contextualised methods in the search for pattern and meaning rather than for prediction and control ... Hence feminist empirical work is multi-paradigmatic (Lather, 1991:18).

Feminist research methodologies now include the whole range from post-positivistic concerns with prediction through interpretive, constructivist, phenomenological and ethnographic concerns to understand, to emancipatory methodologies such as critical, participatory and action research, and postmodern concerns such as poststructuralism and deconstruction. Reinharz (1992:240) proposes ten characteristics of feminist research (which she calls a methodology, but I prefer to call an approach):

1. Feminism is a perspective, not a research method.
2. Feminists use a multiplicity of research methods.
3. Feminist research involves an ongoing criticism of non-feminist scholarship. [To this I would add criticism of feminist scholarship too!].
4. Feminist research is guided by feminist theory.
5. Feminist research may be transdisciplinary.
6. Feminist research aims to create social change.
7. Feminist research strives to represent human diversity.
8. Feminist research frequently includes the researcher as a person.
9. Feminist research frequently attempts to develop special relations with the people studied (in interactive research).
10. Feminist research frequently defines a special relation with the reader.

These characteristics have much in common with environmental education research, particularly the use of a multiplicity of methods, adopting a trans-disciplinary focus, and aiming to create social

change.

#### WHAT FEMINIST RESEARCH HAS ALREADY BEEN UNDERTAKEN IN ENVIRONMENTAL EDUCATION?

The literature on feminist research in environmental education is relatively sparse, and, until recently, has been almost entirely Australian. A similar finding was made by Giovanna Di Chiro (1993:228) when she conducted an ERIC search using the descriptors 'feminism' and 'environmental education' which yielded only two articles, one her own (1987) which was written and published in Australia, and the other by Ariel Salleh (1989), an Australian ecofeminist and social theorist. My own search adds two North American articles (Kremer *et al.*, 1990-1991; Fawcett *et al.*, 1991), one British article (Hallam & Pepper, 1991), and three recent articles in *Environmental Education Research* (Hampel *et al.*, 1996 [again Australians!], Pawlowski (1996) [Polish], Storey *et al.*, (1998) [UK/Brazil]) which have drawn attention to gender differences in environmental knowledge, concerns and behaviours. The remaining literature which specifically relates gender to environmental education is Australian (including Barron, 1995; Brown & Switzer, 1991; Department of Prime Minister and Cabinet/Office of the Status of Women, 1992; Gough, 1994; Gough, 1997b; Greenall Gough, 1993; NWCC, 1992; Peck, 1992; Whitehouse & Taylor, 1996).

Di Chiro (1987) places a feminist perspective on environmental education within a socially critical framework. She grounds her ecofeminist perspective in radical and socialist feminism and asserts that:

A feminist perspective [on] environmental education offers a more complete analysis of environmental problems and therefore a better understanding of those problems and their potential solutions. Such an analysis is political, in that it examines how power relations (in, for example, gender, class, race) shape the world in which we live; it asserts that the 'polity' (human social world) determines and controls how this social world is and has been historically constructed and organised, and hence refutes the myth that the past and present state of the world is a 'natural' and therefore justifiable progression. Moreover, environmental education's analysis of socio-environmental problems is political in that it believes that if human

social relations create the problems that [it] can also change and improve them (1987:40).

In particular, she argues that environmental problems are socially constructed and should be viewed as social problems, that environmental education should engage in a feminist critique of environmental problems, and that it should engage in self-criticism "in order to understand how it is responsible as an educational enterprise for maintaining certain 'un-environmental' values and ideologies" (Di Chiro, 1987:41). While others (such as Salleh, 1989; Fawcett *et al.*, 1991; Peck, 1992) also argue for the first two points to varying degrees, Di Chiro seems to be alone in asserting the need for environmental education to be self-critical as well as socially critical.

Salleh (1989:27) describes an attempt to enact such an approach in a case study of a group of upper working class women coming together "to see what might be done about household waste recycling in their local community". Few of the group had completed high school (only one had a university degree), all were over thirty and either were, or had been, married with children. All were already involved in some kind of ecologically sound practice at home. Opening up the issue with the technique of consciousness raising as a catalyst for moving from personal to political concerns, Salleh (1989:30) found that

it was the tensions growing out of the consciousness-raising process itself that undermined the possibility of their participation in an environmental program ... Their workforce and personal marginality were so severe that they lacked the necessary human support and self-assurance to transform their critical stance into a collaborative praxis.

Responses to the National Women's Consultative Council (NWCC, 1992) consultations on Australian women's priorities for environmental action support Salleh's findings. In Salleh's group few had completed high school and they continued to choose individual action, rather than social or political action, as their focus. In the NWCC study, with respect to the women's priorities for action on environmental issues, there were noticeable differences in the responses depending on their education level:

The less education, the more likelihood that respondents would choose education or individual actions as the principal action for

women, and the less likely they would suggest changing social frameworks or political action. More of the respondents who had not proceeded beyond school level gave individual or personal answers, than women from the other three levels of education (NWCC, 1992:66).

Salleh (1989:30) suggests that for the group she studied to become more effectual, "they would need their self-image bolstered by more social affirmation ... but beyond this are issues of access to such resources as status, time, skill, and political models". She concludes by hypothesising that, if such women gained more experience alongside men in the rough and tumble 'real work world', they might discover the simultaneous empowerment and disenchantment that makes for an ecofeminist praxis.

Fawcett, Marino and Raglon (1991) take an approach with some similarities to Di Chiro's in their focus on reconnecting humans and nature in a reframing of environmental education. They argue for a transformative vision of ecofeminism, which draws on radical feminists' focus on biological differences between women and men, spiritualism, and personal connections to nature, together with socialist feminists' view of human nature and nature as socially and historically constructed. They combine this vision with their notion of social change motivated by materialism - where "the powers behind social change (spiritualism, personal experience, and materialism) are not mutually exclusive" (1991:251). Building from this vision, they suggest an approach to environmental education that works with resistance - "we try to understand how resistance can maintain the *status quo* and identify where transformations can occur" - and explores ideas of personal and social change, resistance, difference, and powerlessness (1991:251). This includes exploring human-animal continuities while engaging in making new meanings. However, they are not looking for a totalising replacement to humans' fractured relations with nature: "Perhaps an affection for some of the chaos around us would be a better goal" (1991:250), because they see paradox and contradiction as being useful for not "reducing the world" (1991:252).

In developing her gender equity and environmental education guidelines Peck (1992) took Brown & Switzer's (1991a) recommendations into consideration, but she adopted a much more critical

approach to society (although her brief could have been interpreted from the liberal feminist perspective of simply identifying gender equity issues in environmental education to provide equal opportunities for girls and boys). Peck convergently evolved her perspective in apparent ignorance of the research and writings of Di Chiro (1987a,b), Salleh (1989), and Fawcett *et al.* (1991), and she has developed the implications of a feminist perspective on environmental education in greater detail.

As her starting point Peck (1992:1) defines what she means by environmental education, equating it with environmental literacy: the need for all people,

to be aware of and concerned about the environment, and to have the knowledge, skills, values, attitudes, motivation and commitment which will enable them to participate in the care and conservation of the environment.

She notes that girls in particular appear to be very interested in this area. She also comments that almost no work has been done on identifying gender equity issues in environmental education, and argues that this is an urgent need.

That there is a paucity of feminist research in environmental education could be considered surprising when related fields such as outdoor education, and, in particular, science education have a history of feminist research (see, for example, Parker, Rennie & Fraser, 1996). Though, as I have argued elsewhere - see, for example, Greenall Gough (1993), Gough (1994), Gough (1997a) - throughout its history environmental education has been dominated by universalised (masculine) perspectives. The history of feminist scholarship in science (see, for example, Keller & Longino, 1996), actually started about the same time as the ecofeminist movement, but, perhaps because of the greater social status of science or because of some of the more extreme writings of some ecofeminists, feminist research in science education has received a much higher profile and generated many more studies than in environmental education.

#### WHAT IS THE POWER AND PROMISE OF FEMINIST RESEARCH IN ENVIRONMENTAL EDUCATION?

A major reason for wishing to explore the power

and the promise of feminist research in environmental education is that the most interesting educational research publications I have read in recent times have been written by feminist researchers. The issues and approaches that are being explored in their work are often very relevant to the concerns of environmental educators and they provide some hope for new directions and possible successes. Feminist research has been an absence in environmental education for too long.

While my personal disposition is towards critical and poststructuralist research, all feminist research methodologies (and methods!) can be applied in environmental education research contexts. We can do many types of research which puts the social construction of gender at the centre of the inquiry, whether we are seeking to predict, understand, emancipate or deconstruct, and we need more stories from women's lives relating to environments that we can use in environmental education (along the lines of Jane Williamson-Fien's (1993) *Women's Voices*).

In the remainder of this paper I argue for poststructuralist research as the most encouraging approach for achieving the power and the promise of feminist research in environmental education.

The power and the promise of doing feminist poststructuralist research in environmental education is that it calls into play a deconstructionist impulse which provokes consideration of the gendered positions made available to students and understandings of gender identity. This approach is consistent with Bronwyn Davies (1994:78) who suggests that a pedagogy informed by poststructuralist theory might begin

with turning its deconstructive gaze on the fundamental binarisms of pedagogy itself: teacher/student, adult/child, internal/external, society/individual, reality/fiction, knower/known, nature/culture, objective/subjective [because] each of these underpin or hold together both what we understand as pedagogy and the discourses through which pedagogy is done.

Such an examination of the binaries of environmental education practices could also form the basis for a research agenda.

Another aspect of the appeal of feminist poststructuralism as an approach for environmental education is summarised by Ben Agger (1992:118). He

argues that,

Another primary aim of feminist cultural criticism is to decenter men from their dominance of various official canons and genres. Equally as troubling as the omission of women from the canon and from criticism is the installation of men as *those who speak for women* - universal subjects of world history. A good deal of poststructural feminist criticism has focused on the issue of the voices in which culture is expressed, the standpoints from which knowledge is claimed.

Decentering the male perspectives which dominate environmental education discourses is a challenge for the future. However, such decentering will not be an easy task. As Grace (1994:19) argues, "men's interests, women's interests and the common interest are all difficult contingent alliances, and the ideological claim to them forms part of continuing negotiations of power". Nevertheless, there is a need to tell 'less partial, less distorted' stories in our research. As I noted earlier, by studying women's experiences we open up new empirical and theoretical resources, provide a new purpose for social science (for women rather than men) and a new subject of inquiry: while studying women is not new, it is new to study them "from the perspective of their own experiences so that women can understand themselves and the world" (Harding, 1987:8).

Empowerment, and the search for more empowering ways of knowing, is a central concern of both critical and poststructuralist theorising; it is also a goal that is shared by many environmental educators. Emancipatory (empowerment) research involves "analyzing ideas about the causes of powerlessness, recognizing systemic oppressive forces, and acting both individually and collectively to change the conditions of our lives" (Lather, 1991:4), and Ellsworth (1989:306), for example, argues that "critical pedagogies employing this strategy prescribe various theoretical and practical means for sharing, giving or redistributing power to students". However, empowerment is not something done *to* or *for* someone; it is a process one undertakes for oneself in the development of a new relationship within one's own particular contexts. We need some research in environmental education which focuses on how women have been empowered, rather than looking at universalised subjects: traditional research has focussed on men's experiences and "asked only the questions

about social life that appear problematic from within the social experiences that are characteristic for men" (Harding, 1987:6).

Because of its political nature and concerns with empowerment it is important to look at power and knowledge in the context of environmental education. This can be the focus of both critical and post-structuralist research. Power and knowledge as they are exercised through discourses are central aspects of poststructuralist theory:

discourses ... are ways of constituting knowledge, together with the social practices, forms of subjectivity and power relations which inhere in such knowledges and the relations between them (Weedon, 1987:108).

The texts, myths and meanings of our culture and our relationships with nature need to be deconstructed in order that we know the stories of which we are a part. Such deconstruction and critical analysis will help practitioners and students to recognise whose interests are being served at particular moments in environmental issues. It will help them to understand that

it does make a difference who says what and when. When people speak from the opposite sides of power relations, the perspective from the lives of the less powerful can provide a more objective view than the perspective from the lives of the more powerful (Harding, 1991:269-270).

The challenge is to encourage the development of alternative discourses by drawing attention to whose knowledge is legitimated and valorised in the power/knowledge structures of the dominant discourses. In particular, women's knowledge needs to be recognised and valued.

The dominant discourses in environmental education treat the subject of knowledge as homogeneous and unitary because knowledge must be consistent and coherent. Thus, in the behaviourist/individualist model which dominates much of these discourses, there is an emphasis on individuals having 'the right behaviour' and the knowledge of how to 'get it right'. This implies a power relationship where some take it as their role to set out what those 'right behaviours' are. However, it is no longer possible to find an emancipatory universal subject: as subjects/agents of knowledge we are all part of multiple, heterogeneous and contradictory or incoherent positionings

of race, class, gender and ethnicity, and there is no one right way of knowing or behaving.

Such multiple subjectivities are constantly achieved through relations with others (both real and imagined) which are themselves made possible through discourse. Accepting that the subjects of knowledge are multiple rather than homogeneous, unitary and universal has implications for curriculum, pedagogy and research in environmental education. Exploring and developing such possibilities for environmental education is a challenge for the future.

While poststructuralist research in environmental education is a challenge, I believe it also offers much promise which is consistent with the stated goals of environmental education. The dominant discourses of environmental education recognise that the environment and environmental problems are complex, not simple. For example, the guiding principles of environmental education from Tbilisi (UNESCO, 1978:27) refer to the multiple subjectivities of the environment - "consider the environment in its totality - natural and built, technological and social (economic, political, technological, cultural-historical, moral, aesthetic)" - and "the complexity of environmental problems". While not overt nor necessarily intended such a perspective requires the multiple readings or interpretations of the environment which are consistent with adopting poststructuralist pedagogy and research approaches.

An anonymous reviewer of an earlier draft of this paper commented that,

Just because the authors of [the Tbilisi] report advocate that multiple environments should be considered in EE, [this] does not imply [that] any particular perspective should be adopted in viewing those environments. Such a consideration can take an externalized, objectivist or positivist stance toward examining these different environments. Many approaches to EE that claim to be based on these principles in fact have interpreted these principles from such a behaviourist or positivist perspective.

If the Tbilisi statements can be (and have been) appropriated in this way by behaviourists to be consistent with their stance, it seems to me that it is quite legitimate to read them as offering the potential for multiple readings consistent with feminist poststructuralist research approaches. The

multiple readings I am suggesting are not only of nature but also of the individuals and groups which are concerned with the particular environment or environmental issue: there is a need to develop local or situated knowledges which disrupt oppressions. We should be listening to multiple stories in the spirit of a partnership ethic (and its precepts) rather than following an egocentric or homocentric ethic (Merchant, 1996).

Whatever the issue or environment, there are multilevel meanings of narratives and texts, and multiple stories which can be told. There is not 'one true story'. The knowledges involved in dealing with environments are multiple, involving both humans (where each human is a multiple subject) and nonhuman nature (which also has a multiple subjectivity), and must be considered as such. Thus poststructuralist pedagogy and research is also consistent with partnership ethics in that it is concerned with listening to the voices of the marginalised as well as those of the dominant discourses.

Poststructuralist research is also concerned with deconstructing power/knowledge relationships, which is also a goal of a partnership ethic in environmental education. As in critical research, it is important to analyse who has the power and what can be done to dismantle or subvert it through developing counter-hegemonic and oppositional discourses. However, in contrast with a critical research this power can be other than economic, and more than the dominant voices should be heard. We need to know the stories of which we are a part and to develop local knowledges.

Poststructuralist research which is consistent with a partnership ethic is also concerned with the liberation of nature and people. The goal is "to work toward a socially-just, environmentally sustainable world" (Merchant, 1996:222). It is time to stop trying "from the outside, to dictate to others, to tell them where their truth is and how to find it" (Foucault, 1990:9). By engaging in feminist research in environmental education we will be able to come closer to achieving this goal because we will have less partial and less distorted stories.

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for their constructive comments. I hope I did them justice.

#### NOTES

1. The term 'liberal feminism' is often used to characterise the dominant form of feminism up to the 1960's. Its current form, inspired by the works of Simone de Beauvoir (*The Second Sex*, 1949) and Betty Freidan (*The Feminine Mystique*, 1963), "emanates from the classical liberal tradition that idealizes a society in which individuals are provided maximal freedom to pursue their own interest... [and] endorses a highly individualistic conception of human nature" (Warren, 1987:8). This conception locates our uniqueness as humans in our capacity for rationality and/or the use of language (Jaggar, 1983) and "when reason is defined as the ability to comprehend the rational principles of morality, then the value of individual autonomy is stressed" (Tong, 1989:11). For liberal feminists, the attainment of knowledge is an individual project and their epistemological goal is "to formulate value-neutral, intersubjectively verifiable, and universal rules that enable any rational agent to attain knowledge 'under a veil of ignorance'" (Warren, 1987:9).

Historically, liberal feminists have argued that women do not differ from men as rational agents, and that it is only their exclusion from educational and economic opportunities which has prevented women from realising their potential (Jagger 1983). However, according to Tong (1989:11), the current status of liberal feminist thought is difficult to determine because liberalism "is in the process of reconceptualizing, reconsidering and restructuring itself". Critiques of liberal feminism focus on the alleged tendencies to accept male values as human values; to over-emphasise the importance of individual freedom over that of the common good; to adhere to normative dualism, and to valorize a gender-neutral humanism over a gender-specific feminism (Jaggar, 1983, Tong, 1989).

2. The term 'ecofeminism' was coined in 1974 by Francois d'Eaubonne "who called upon women to lead an ecological revolution to save the planet. Such an ecological revolution would entail new gender relations between women and men and between humans and animals" (Merchant, 1996:5).

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