The “Nature” of Environmental Education Research From a Feminist Poststructuralist Viewpoint

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Abstract
For a generation or more, environmental education discourses have been constructed around persistent Cartesian dualisms of modernist thought that divide an “othered” category of being from that of a constituted homogenous human identity. During the same period, both feminist and post-structuralist theorizing has acted to destabilize the constitution of identities, revealing knowledge, including environmental knowledge, to be multiple, subjective, contingent, and intimately tied in with embodied experiences of place. We explore some of the contingencies of environmental knowledge as revealed through a poststructuralist feminist research methodology and the place for such understandings within an early twenty-first century vision for environmental education research and practice.

Résumé
Pendant au moins une génération, les discours de l’ERE ont été construits en fonction de dualismes cartésiens persistants issus de la pensée moderniste et opérant une séparation entre une catégorie « autre » de l’être et un ensemble constitué et homogène de l’identité humaine. Pendant cette même période, les théories féministes et post-structuralistes se sont employées à déstabiliser la constitution d’identités en montrant que le savoir, y compris le savoir environnemental, était multiple, subjectif, contingent et intimement lié à une expérience infuse des lieux. Nous explorons certaines des contingences propres au savoir environnemental, telles que révélées par une méthodologie de recherche féministe post-structuraliste. Nous sondons également quelle place peut être faite à de telles réflexions au sein de l’optique envisagée en ce début de XXIe siècle pour le domaine de la recherche et de la pratique de l’ERE.

The rise of the global environmental movement in the 1960s coincided with the innovations of feminist theory and the contributions of European cultural theorists whose insights have come to be collected under the umbrella term of poststructuralism. As part of these contributions, “the self-fulfilling autonomous subject-acting-on-an-object . . . associated with the concurrent domination of nature, women and non-European cultures” (Conley, 1997, p. 1) came under intense scrutiny as theorists found new ways for thinking through the ecological and socio-cultural complexities of twentieth century life.
The resultant shifts in thinking emerging in the last four decades have opened up new ways for doing research in educational fields. Poststructuralism, as a movement, owes many of its original ideas to an understanding of ecological awareness, although in the “tidal ebb and flow” of these ideas, the ecological connection has not always been apparent (Conley, 1997, p. 1). In this paper we discuss the contributions to contemporary environmental education made by both poststructuralist and feminist ideas. We argue that, at the intersection of these three major intellectual movements of the twentieth century, we can find productive methodologies for undertaking environmental education research in the twenty-first century.

Harding (1987) defined methodologies as theories and analyses of how research should proceed. We have used feminist poststructuralist research methodology for a number of years to research alternatives for thinking through constitutions of environmental knowledge (Davies & Whitehouse, 1997; Whitehouse, 2000, 2001, 2002) and the subjects of international environmental education teaching and research (Gough, 1994, 1997a, 1999a, 1999b). An important contribution of poststructuralist thinking is that it brings into focus the subject of subjectivity to consider the ways in which we experience ourselves within space, place, and time (Probyn, 2003). The contribution of feminism has been to reveal gender as central to conceptualisations of the agentic subject (Davies, 1993). In this paper, we use a blended narrative of personal research stories and analysis to expose how we have been thinking on the combined contribution a feminist and poststructuralist analysis can make to future environmental education research.

**Annette’s Story**

Having worked in the field of environmental education for nearly twenty years I came to my doctoral research study (Gough, 1994) with an intention of looking at environmental education as a “man made subject,” drawing attention to the absence of female voices in environmental education discourses and proposing some strategies for their inclusion: an approach that could, perhaps, be caricatured as essentialist and liberal feminist. Through researching, reading, and writing I increasingly came to recognize that women are one of many marginalized groups, absent and/or silenced, in the foundational discourses of environmental education, and that multiple subjectivities abound. The project I started was not where I ended, but I learned much about identity, subjectivity, and myself along the way.

In undertaking an analysis of the “foundations” of the field, I was inspired by the words of A.S. Byatt (1990) to create a reading of the texts of the field which had “a sense that the text has appeared to be wholly new, never before seen, . . . followed, almost immediately, by the sense that it was always there, that we the readers, knew it was always there, and have always known it was as it was, though we have now for the first time recognized, become
fully cognisant of, our knowledge” (p. 472). And although I did not have these words at the time, Carolyn Heilbrun’s (1999) notion of the state of liminality was also where I felt I was situated: “The word ‘limen’ means ‘threshold’ and to be in a state of liminality is to be poised upon uncertain ground, on the brink of leaving one condition or country or self to enter upon another. But the most salient sign of liminality is its unsteadiness, its lack of clarity about exactly where one belongs and what one should be doing, or wants to be doing” (p. 3).

I embarked upon a study to explore the foundations of environmental education in terms of its grounding in modern science as well as the gender relationships in society. The discourses I related to environmental education were:

- its grounding in modern science;
- its relationship with behaviourist and critical research in education;
- the political and economic worldviews that are both explicit and implicit in its rhetoric;
- its colonialism; and,
- its relationship with developments in philosophy, particularly ecofeminism and feminist epistemology.

In analyzing and drawing attention to the relationships between the discourses of environmental education and other significant discourses I felt that I was providing a “traitorous” (Harding, 1991, p. 288) reading of the field by reading against the grain of my dominant experiences in the field, and against the founding fathers’ stories with “a focal interest in signification, in power/knowledge relationships, in the harm done by master-narratives, and in the way institutional structures are controlled” (Greene, 1992, p. ix).

The “founding tongues” of environmental education were males from scientific backgrounds, and I analyzed the work and words of these founders by adopting feminist research methodologies. In many ways my study was attempting, on a smaller scale, to apply to environmental education what Carolyn Merchant (1980) did in her study of “women, ecology and the Scientific Revolution.” The founders and foundations of environmental education, particularly those in Australia, were therefore the focus of my study. There were also cross-cultural references to the situation in the United States of America because of the on-going links between the two countries with respect to environmental education, and the influence that the earlier developments in the U.S. had on developments in Australia and on international discourses in the field (Gough, 1997b).

The study had as its goal an analysis of the foundational discourses of environmental education, the outcome of which was “neither unitary whole-ness nor dialectical resolution” (Lather, 1991, p. 13) but rather the suggestion of some different research principles for environmental education which reject-
ed traditional binaries of “Man” and “Environment” and incorporated per-
spectives from ecofeminisms, feminist epistemologies, and feminist research
methodologies. In so doing, and in the spirit of the quotation from Byatt
(1990) mentioned earlier, I provided another reading of the same text of envi-
ronmental education, but one which, I hoped, was toward being “wholly new”
but also recognized as always having been there.

A Feminist Standpoint

The major contributions of feminist research, in all its many forms, have been
to raise the question of epistemological claims such as who can be an agent
of knowledge, what counts as knowledge, what constitutes and validates
knowledge, and what the relationship should be between knowing and
being. Feminist questions put the social construction of gender at the centre
of research (Lather, 1991), and “what ‘grounds’ feminist standpoint theory
is not women’s experiences but the view from women’s lives” (Harding, 1991,
p. 269).

Feminism enables people to re-vision their world—“to know it differently
than we have ever known it; not to pass on a tradition, but to break its hold
“Women began to portray the new possibilities that, as a result of feminism,
they found themselves confronting. They began to question . . . all strictures
about women and about the institutions in which women now, in even
greater numbers, and in a state of awakening, found themselves” (p. 8).

Ecological feminists have embraced personal and political action to
“fully engage in the interweaving of humour, irony, grace, resistance, strugg-
le and transformation” (Sandilands, 1999, p. 210) to envision a more dem-
ocratic future for all. And, increasingly, environmental education researchers
whose work is informed by feminism are publishing their work (see, for exam-
ple, Fawcett, 2000, 2002; Lotz-Sisitka & Burt, 2002; Lousley, 1999; Malone,
1999; Russell, 2003), after a rather dry spell (Gough, 2001). But despite these
inroads, the subject of gender remains marginal to much environmental edu-
cation research.

As we see it, many researchers still consider a “human” subjectivity to
be homogenous, ungendered and unproblematic when, in fact, a vast edifice
of sociological research reveals the opposite to be the case. Environmental edu-
cation research remains bound up with traditional epistemological frameworks
of scientific research, which have, in Sandra Harding’s (1987) words, “whether
intentionally or unintentionally, systematically exclude(d) the possibility
that women could be ‘knowers’ or agents of knowledge” (p. 3, emphasis in
original). For example, recent writings on significant life experience research
in Environmental Education Research can be critiqued as remaining blind to
gendered subjectivities (Gough, 1999c).
Addressing the balance is simply not a matter of “adding women” to traditional analyses. What is needed is a transformative process where new empirical and theoretical resources are opened up to reveal new purposes and subjects for inquiry. It is our argument that what needs to come under scrutiny is the implicit constitution of the assured, homogenous, and universalized human subject of much environmental research. “Human” identity as constituted through positivist research regimes is not inclusive of all the different ways of being in the world.

Much past environmental education research has analyzed only male experiences, or has constructed universalized subjects, which are not distinguished as male or female. Yet, there is no universal “Man” who acts as a powerful agent on an equally symbolic “Environment”—except perhaps in the imaginations of writers who reproduce these discourses. “Man” is not a term that is logically inclusive of women. Early formulations of environmental education, such as the IUCN (1970) definition (as cited in Linke, 1980) referred to “the interrelatedness among man, his culture, and his biophysical surroundings” (p. 26-27). Although more recent environmental education literature is gender neutral in its language, this too is a problem as the neutral voice is still interpreted as a male by readers of both genders. As Cherryholmes (1993) argues, “texts that deny gender present themselves as generic. They pretend to speak the truth and truth is gender-neutral. Authoritative texts are distanced, objective, have a single voice (otherwise they would not be authoritative), are value-neutral, dispassionate and controlling” (p. 10). Perhaps the shackles of the past are proving difficult to shrug off, but the practice of creating gender-blind binaries is exclusive of lived experience.

In reality, we have culturally, racially, socio-economically, sexually (and so on) different people with fragmented identities whose experiences and understandings can only be constituted through the lenses of subjectivity. However, to date, environmental education research has rarely addressed areas of different women’s experiences and knowledges, which means that many useful insights have not been adequately pursued. We acknowledge that environmental education research has generally ignored other aspects of human identities too, but these are beyond the scope of this paper. Our emphasis here is on women’s experiences and knowledge.

The Problem of Binary Thinking

Many ecofeminist researchers have discussed the “Man” and “Environment” binary and associated the destruction of nonhuman nature with the oppression of women (see, for example, Eckersley, 1992; Merchant, 1996; Plumwood, 1995; Salleh, 1997). As Eckersley (1992) notes, ecofeminists have embraced the association of women and nature “as a source of empowerment for women and the basis of a critique of the male domination of women and nonhuman nature” (p. 64, emphasis in original). However, ecofeminist writing
to date has tended to be critical of postmodern and poststructuralist approaches. For example, Salleh (1997) argues “the tenets of deconstructive practice have been catechised and used as political rhetoric, resulting in an impractical nihilism when applied to everyday life” (p. 9). Thus, while our work is informed by ecofeminist writings, we reject such criticisms of the postmodern to argue that feminist poststructuralist methodologies can be productive for environmental education research.

From our perspective, the problem of the “nature” of environmental education research is further compounded if we look at the other side of the binary to the constitution of the “Environment,” produced as an object of study, rather than as a subject for research. In support of our stance we draw upon Harding (1987) who argues that the best feminist analysis “insists that the inquirer her/himself be placed in the same critical plane as the overt subject matter” and that the researcher “must be placed within the frame of the picture that she/he attempts to paint” (p. 9). Research on an imagined “Environment” distanced and objectified and empirically impossible to determine, does not fall within this feminist research rubric. In addition we ground our work in the arguments of Taylor (1991) who makes the case for constituting “many women, many environments,” in order to expand research thinking, and, extending this notion, Conley (1997) suggests the constitution of environmental, or ecological subjectivities as worthy of theorising and study.

Jagtenberg and McKie (1997) argue that “the vocabularies of social theory are limited when it comes to characterising the relationships between humanity and other species” (p. 8). Analysis of recent environmental education research shows a minimal approach towards tackling the limiting vocabularies through which the world may become known. Most of this research remains bounded within the modernist/positivist constitution that “Man” (now transmogrified into “Human” through equally gender blind language) is indeed a fixed and separate actor from a distinct and singular “Environment.” Yet, if the world is indeed divided into these two categories of being, why are the boundaries between them impossible to locate?

Similar problems arise when making a close examination of the categories “Human” and “Nature.” Soper (1995) argues that “nature” is impossible to define, because it is not a thing existent in itself, but a category of human identity. “Nature” exists to define what is or is not “us” in traditional Western thought. And membership of the category “us/human” has shifted constantly through Western history. Women, on the basis of sex alone, used to be confined to the category of “other” in the not-so-distant past.

Binary thinking traps research processes into a persistent stasis, erasing a complexity, which might otherwise be meaningful in the pursuit of elegant solutions to contemporary socio-environmental problems. Noel Gough (1991) asserts that to uncritically accept the positivist meta-narratives of Western knowledge, represents a failure of responsibility for creatively “singing the world into existence,” which may be one of the functions of innovative
environmental research. While it was difficult for both of us to abandon binary thinking (being very well schooled in binary practices) we did manage (over time and in conversation with each other) to take up the challenge for doing our own singing—and we are willing to risk the consequences. In our view, being able to think more complexly opens up exciting possibilities for research. Complexity is an exciting invitation.

Hilary’s Story

I spent at least 30 years of my life talking through the familiar binary discourses of “man” and “nature,” remaining quite ignorant of the power of language to shape the world. I hadn’t realized how “naturalized” these discourses were, nor was I aware of how differently the world can be spoken into existence. Even when I shifted my own terminology from “man” to “human” in line with general feminist understandings and education policy, the nature of “nature” remained enigmatic. The term is so deeply embedded within Western culture, that it becomes almost impossible for us (this indeterminately authored, whitey humanized “us”) to think outside the binary categories of “human” and “other.” Our fellow earth travellers, those multitudinous fleshy bodies who become constituted as the other, as the “non-human,” and as “other species,” get lumped together in a category of identity called “nature” and its twin “the environment” and these terms litter all the environmental literature as if they are indeed unproblematic and universally understood.

We (I am using this term most advisedly) all think “we” know what nature looks like and smells like. “Nature” is green and blue and grey and red. It smells green and fresh and salty and damp. “Nature” is composed of all those beings who do not fall into the (shifting and mobile) category of “human.” “The environment” is a similar category of being, though perhaps a little less explicitly “natural.” “Nature” and “the environment” are conceived in common socio-educational and politico-economic discourses as knowable and understandable terms. Hey, “we” all know what nature is, right?

No, “we” don’t.

It took my meeting with Nora, a university lecturer from Papua New Guinea to fully accept how blind I had been in initiating research into tropical environmental meanings without fully comprehending the discourses I was negotiating. Nora took it upon herself to explain to me in her most graceful and perceptive way, how it was not only possible to think differently, but, indeed that many people do, as part of their own dominant socio-cultural practices.

Nora was born in the Western Province of Papua New Guinea and lived as a child on an island in the Fly River. She moved to Daru and then Port Moresby to attend school and university.

Nora explained to me that in her village language (as opposed to English which she had learned for the purposes of getting herself an education) there is “no term for nature.” A phrase such as “human relationships with Nature”
(so common in environmental education curriculum discourses) does not carry any relevant meaning in her first language. As Nora told me: “Nature in my language, it’s not there. I mean there is no such word as nature. It’s not part of the language. The only way you can relate to the word is by the individual names of things, your experiences in living and interacting with the seas, the forests.”

Nora explained that in the Fly River every body has their own name. Personhood is not imagined as having special status over differently embodied forms. The crocodile owns the river so people must be careful. Trees are not classified together with birds on the basis of possessing a characteristic called naturalness. Trees are in and of themselves part of the collective imagination that binds space, place and subjectivity together in ways that I (being so well schooled in binary thinking) can only hazily imagine.

Nora learned to talk nature as part of her high school experience of an Australian designed curriculum. She figures that somewhere between Grade 9 and Grade 12 she had learned to “speak nature.” Nora’s story is not an isolated one. Many educators from the Pacific Island region have learned to speak nature at school (Whitehouse, 2000).

What I really learned from my research was how to question. If powerful binary discourses holding a “humanised identity” firmly in place remain the subjects of environmental education, how much are we really changing things? If current research and curriculum practices deliberately ignore different ways of speaking the world into existence, how democratic is international environmental education? If environmental education unproblematically reproduces discourses of “the natural” without explicitly recognising that there are multiple ways in which to think about and comprehend the world, can democracy in practice truly be claimed?

These days the terms “human” and “nature” fail to convince me with their meaning. I read the environmental literature as being in a liminal state, as a mosaic of understandings. It was an intense intellectual struggle to come to terms with the binary habits of language through which I had been so well schooled. But it is to the power of language to shape our understandings to which we now need to turn our attention.

**Contributions from Poststructuralism**

A key Nietzschean - Foucauldian insight (to identify the genealogy) is that truth cannot be separated from the procedures of its production (Tamboukou, 1999). Any research methodology will reveal its own set of truths. In spite of a long history of such claims, there is no empirically discovered set of universal “large T” truths concerning the differential production of social and environmental knowledge. What can be discovered is that which can be revealed through the investigative methodology and the conditions of investigation. Modernist and positivist understandings will therefore differ from postmodernist
and poststructuralist understandings as to the creation and applications of knowledge. This rich diversity of viewpoints needs to be recognized and celebrated for what it reveals about social and environmental meanings and actions.

We do not live in a mono-dimensional universe. According to recent research, a concept of 11 dimensions is the minimum needed to attempt an explanation of the evolution of the multiverse (Barrow, 2002). It therefore seems unrealistic to expect that any one research methodology, as a set of “small t” truth claims, will suffice to give a complete understanding of an identified field of human endeavour such as environmental education. No one methodology or way of constructing the world can either encompass or reveal all possibilities for knowing or for effective environmental action, and no favourite chosen research methodology can be the only way to (a singular) truth. When set alongside all other methodologies in education research, a feminist poststructuralist approach can be very informative and revealing of certain dimensionalities that may otherwise be ignored or silenced within the field.

There are many attractions to a poststructuralist approach. Quigley (1995) made the point that the ecological project “would benefit from a thorough reconsideration in light of poststructuralist philosophy” (p. 592) because the traditional postures of ecological thought shared too many features with the traditional power structures the ecological movement wished to oppose. Our own attraction to poststructuralism was the freedom and creativity to explore the texts, myths, stories, and meanings of which we are a part.

One of the key features of a poststructuralist research approach is the focus on the language and meanings through which we constitute our ontological and epistemological understandings. A poststructuralist analysis looks at “the work that language does to limit, shape, and make possible one kind of world or another” (Davies, 1993, p. xviii).

Weedon (1987, p. 167) provides a number of frames in which to conduct a feminist poststructuralist analysis that we have found useful:

- Literature is one specific site among many where the ideological constructions of gender along with other forms of subjectification takes place.
- The central focus of interest becomes the way in which texts construct meanings and subject positions for the reader, the contradictions inherent in this process and its political implications, both in its historical context and in the present.
- The central humanist assumption that women or men have essential natures is denied.
- The social construction of gender in discourse is central.
- Feminist poststructural analysis refuses to fall back on general theories of the feminine psyche or biologically based definitions of femininity, which locate its essence in processes such as motherhood or female sexuality.
St. Pierre (2000) has written that “feminists in education increasingly use poststructuralism to trouble both discursive and material structures that limit the ways we think about our work” (p. 477). Poststructuralist theorizing looks at the constitutive force of social structures and language within a historical context, to make more apparent how it is that (human) subjectivities are come into being. One of the major insights such social theorizing offers to environmental education, is to make explicit the webs of power, agency, and desire in which we are caught and to illuminate which social forces are at work to either enhance or limit an individual’s ability to act. As such, poststructuralist analysis presents an opportunity to challenge the privileged certainties of meta-narratives and the configurations of power carried within them. It also provides opportunity for exploration, deconstruction, and re-invention. And such analyses can have practical advantages.

As Doyle (2001) points out, “one of the strengths of postmodern analysis is that it has opened up possibilities for understanding the world in more ways than just simple dualisms” (p. 221). Politically this can have the effect of articulating a communal politics, which, to quote Wheeler (1995) “is not essentialist, fixed, separatist, divisive, defensive or exclusive” (p. 105). Within environmental education, feminist poststructuralist analysis allows the description of socio-cultural discursive practices that would otherwise be absent from the environmental literature, and as such, informs more completely our collective understandings of contemporary complexity (see, for example, Whitehouse, 2002).

Changing language practices can have powerful effects. One of the key learning areas identified in Australian curriculum documents is called “Studies of Society and Environment.” One of Hilary’s colleagues changed the name of the third year university curriculum course designed to cover this learning area to “Social and Environmental Education.” The difference is subtle and yet profound. Playing with language can shape curriculum possibilities. In this example, “Environment” is re-shaped from a logo-centric, disembodied concept to an actual practice of education. Add the word “tropical” and a location emerges along with ideas for re-writing curriculum through a pedagogy of place. Similarly, curriculum documents that construct a “human” and “environment” dualism can be re-thought and re-framed to reflect what Howitt and Suschet-Pearson (2003) call the “transformative energy” (p. 564) of ontological pluralism.

Awareness of the power of language to shape gendered subjectivities and the meanings of curriculum and pedagogy enables us to act by (and through) changing language practices. The outcomes of deconstruction are not nihilism as many have argued, but the reconstruction of acute understandings of agency and power. With imagination these analyses provide re-cognition of different singing worlds.
Conclusion

In this paper we argue that adopting a research approach which moves away from representations of universalized subjects, such as the mythic “Man” and “His Environment,” and towards a distinct recognition of multiple subjectivities will create research in environmental education that more accurately represents the diversities of lived experiences. We have provided our real life narratives which trouble the discursive structures that limit our work as researchers. This viewpoint from “down under” seeks to broaden conceptions of the “nature” of environmental education research and demonstrates the potential of feminist poststructuralist research as a methodology for productive research in environmental education. By turning our gaze on some of the blind spots in environmental education research we hope that we have opened up a space to move the field into a more democratic future.

Notes on Contributors

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References


