

Reconsidering What Feels Like Failure: Lessons From Environmental Life History

Mary Faeth Chenery **Almut Beringer**







n this paper, we argue that some forms of research in environmental education need rethinking. By critiquing a study of environmental life histories—embarked upon with the best intentions of helping—we hope to show how perspectives from ecopsychology and ecotherapy can offer some ways up from what feels like failure and to suggest some implications for the conduct of research in environmental education.

The research report; written by Mary Faeth Chenery

Environmental Life Histories

When I was first presenting the results of this research at the 10th National Outdoor Education Conference, in January 1997, I intended simply to report about how a small number of people described their views about the environment and how they felt they had come to those views. A lot of things have happened, though, since I set out to do the research several years ago, and since I began to analyse the data seriously. For example, I organised a workshop that provided ideas which turned out to be slightly unsettling for me. They were ideas about social injustice, gender, voice, oppression, and poverty. Then, as I was analysing the data and reviewing the literature, I began to feel a little unsettled about the research itself, and the context within which it was conducted. Specifically, it now seem to me that I have simply replicated two earlier studies, and have found the same information those researchers found. Nothing wrong with that—it's useful and rare to provide replications. But in reflecting on a paper by Robottom and Hart (1995) I have found myself to be carrying on in the well established process of research based on assumptions of individualism—a time honoured tradition I criticise in other papers I write. I also find myself immersed in and distressed by pressures that have affected the conduct of this research which meant that I have conducted none of the interviews I've analysed, a slightly disconcerting experience. The interviews were conducted by my co-author, Almut Beringer.

T R S

In the research which was the original focus for this account, an 'environmental life history' study, things turned out as expected-findings replicated previous environmental life history results. Yet the investigator in this apparently 'successful' research, Mary Faeth Chenery, was left with questions such as "So what?" and "Have I simply reproduced the conditions which contribute to the problems I'm trying to solve?" Her colleague, Almut Beringer, has critiqued-and 're-viewed'-the study, setting out some reasons why the research was indeed of value. The two 'halves' of this article open a dialogue about the value of environmental life history research, and offer some insights into qualitative research method in environmental education. In the process, implications may be drawn for environmental education and for a range of issues within qualita-

'environmental life histories are political'

In brief, I have come to see that we are all enmeshed in cultural, political, economic, and other institutional forces which remain undisturbed while we continue to see ourselves as individuals, individually responsible for what happens to the environment, and hence individually responsible for the solutions to environmental problems. Just recycle and compost and take public transport. Don't consider or get involved in group action or criticism at a system level. Don't notice the ads for a Toyota four wheel drive that show pictures of six different and beautiful natural sites across Australia with the caption 'Been there; Done that'. I believe that society provides—with reinforcment from the professions of outdoor education and education broadly—a very effective set of blinders and darkened glasses so we will forget about the environment and what's happening to it. Instead we focus on personal development, with the occasional reference to minimal impact. Meanwhile the places we go to, the places we value, the quality of life around us in the bush and in the cities just go further into decline.

I have realised that environmental life histories are political, that research is political, and that I need to become much more conscious of this fact.

Investigating the life stories people tell about their relationship to nature

The purpose of the Environmental Life History project was to study and to propose theory about the nature of individuals' relationships with the environment and the ways in which those relationships develop. I was particularly interested in the dynamics of development— 'how it works'—and what facets of childhood and adult lives influence environmentally sound behaviours in personal life and in actions taken on behalf of protecting the environment.

The influences upon individual development with respect to knowledge about and actions towards the environment are complex, and have to do with life experiences, education, culture, and psychology. I believe that it is important to study these influences in a systematic manner, from the perspective of individuals as well as groups and cultural institutions, such as education, family, and community. The Environmental Life History project addressed the individual perspective.

'we may be better able to understand how a short term experience....may affect people's relationships with the environment'

People relate to the environment directly through such activities as tourism, outdoor recreation, and outdoor education, as well as through work settings, and also less directly through, for example, food, air quality, day-to-day home and leisure activities, and the aesthetics of their outdoor surroundings. In outdoor education many of us are particularly concerned with how outdoor experiences occurring through tourism, recreation, and education may influence subsequent behaviour. Through environmental life histories, we should be able to gain a greater understanding of the complex background which people bring to outdoor experiences as adults. Knowing this we may be better able to understand how a short term experience in adulthood-such as a week in an ecotourism program—may affect people's relationships with the environment.

The research question was, therefore, "How do people develop attitudes and behaviours towards the environment?" Key sub-questions to be investigated included:

- What is the nature of people's relationships towards the environment?
- How do people acquire a moral responsibility for nature?
- How do people develop caring in relation to the environment?
- What are key influences in childhood and adulthood that affect relationships with and attitudes towards the environment?

Fourteen interviews were completed. Some of the individuals we selected we knew to be quite involved in environmental activism, some to be active bushwalkers, and some we did not see as particularly active with regard to the outdoors or environmental issues. Each interview was planned to take around an hour at most. After developing some rapport with the interview participants, the interviewer asked questions such as:

- Would you talk to me a bit about how you think and feel about the outdoors and the environment now, as an adult, and at this point in your life? For example, how would you describe your relationship with the environment?
- If you were to write about your philosophy and values in relation to the environment what kinds of things would you include?

- Have you noticed changes in how you feel or have felt about the environment as you have grown older? Could you describe those changes or give an example of them?
- How do you think you came to these feelings, this way of relating to the environment? What would you say led you to this philosophy?
- Are there particular people or experiences that have influenced you substantially in relation to your experience of the outdoors? Could you tell me about some of them?

The group of 14 people interviewed, eight women and six men, ranged in age from 22 to 79, with most in their midthirties to early forties. Their professions included teacher, cleaner, artist, architect, manager, lecturer, student, and retiree. While all but one were living in Central Victoria, eight grew up in the Melbourne area, one in Sydney, two in country Victoria, one in country New South Wales and two overseas—one in Scandinavia and one in the United States of America. While six described some environmental activism along their paths only one was professionally involved in environmental activism and two others were professionally involved in outdoor education.

Descriptions of participants' current views of the environment

'some [feelings] were expressions of anger....some were a sense of grieving'

The process used for analysis of the interviews was a review of transcripts for themes, patterns, and categories in order to build a description that would do justice to each person's story. Participants spoke of wanting to leave the land in a better condition, and of aesthetic interest in the land; they talked about taking responsibility for the Earth and used the concept of stewardship for the Earth. A number of interviewees talked about the importance of trees, of habitat, of nature in general, of nature as precious and as a balance for people. A strong theme was a love for the bush, and very strong feelings were expressed regarding protecting the environment. Among these feelings, some were expressions of anger at the destruction of the environment, some were a sense of grieving about the destruction. One talked about the inevitability of the destruction of the environment, and hopelessness about that. In describing their environmental philosophies participants used terms such as interconnectedness, harmony, respect, balance, harmlessness, and the Earth as mother. A number of participants expressed concern for the long term impact of humans on the environment, wanting that impact to be 'passive' or minimal. One spoke of providing a voice for the environment. Several talked about the environment as a living entity of which humans were part, and described the forest as an organism. Natural settings were an integral part of human well-being according to one; outdoor experiences offer opportunities to realise that some cultural things are not that important. Everyone, it was said, should have an opportunity to create a relationship with nature.

'women spoke.....more specifically about the land.....[m]en spoke more generally about protecting the environment'

Although I found mostly similarities in the ways women and men described the environment and their philosophies, women spoke somewhat more specifically about the land, about gardening, about the importance of nature, especially trees. They also raised the issue of aesthetics, spoke of grieving for the environment and anger at its destruction, and in their philosophies offered terms like harmony, respect, balance, unity, and interconnectedness; it was a woman who spoke of the Earth as mother. Men spoke more generally about protecting the environment and taking care of it.

The 14 people interviewed expressed quite positive views of the environment and a sense of responsibility about protecting it. These views affected their day-to-day lives in a range of ways. One woman had no music in her house so that she could hear nature and her senses might become more astute. One man spent time in prayer for the Earth. Most chose products with less packaging, recycled, composted, and considered transportation in terms of its environmental impact. One man was trying to guide the development of the land he was building on by refusing wherever possible to bring anything on to the land that could not be eaten in some form. A number gardened and sought to build back the soil.

How they came to those views

What path, then, did these people describe that led eventually to their positive views of the environment? All but one of the interviewees spoke of time as a young person wandering freely in the bush nearby or going to the bush on weekends, or playing in the trees in their yards, or going to the country, often to farms, on holidays. The impression was given of lots of time spent outdoors in the company of nature, usually bushland, sometimes the sea or a river or a creek. Some of this time was contemplative, reflective time, time spent sitting in a tree, mulling things over, being healed of little hurts they had experienced. At a more intense level one man 'went bush' for many years following a nervous breakdown in his early 20's. He came out of the bush only, he said, to run for Senate in order to protect the forests.

Half of the group, six women and one man, spoke of their distress at seeing the environment degraded or destroyed at some point in their youth or young adulthood. One spoke of her anger at the destruction of the environment; several spoke of sadness at seeing trees cut. As adults the sense of loss about parts of the environment was repeated; a real sadness and, in one case, a sense of hopelessness was expressed. One woman commented, 'I feel really sad to be part of the first generation of Australians who do environmental studies from an early age at school....and to [still] see decisions being made that are not in the long term best interest of our land'.

We asked about changes occurring in their views as they grew older. Among the women some spoke of getting closer to nature, developing and having more time for a deeper relationship, and developing a more spiritual relationship and a stronger love for nature. One spoke of a shift from idealism to an understanding of the complexity of issues to a current stage of recognising that she needed to take care of herself as well as of the environment. A young woman talked of becoming more observant of nature, finding her wonder at the interconnectedness of nature growing daily, and becoming more holistic. Another spoke of seeing the increasing destruction of the environment. An older woman spoke of having more resources to do things related to the environment.

Among the men, one described an increasing sense of urgency and the necessity to help on a global scale. One found himself with less time to be in nature. A shift in perspective was described in one man's move from his early competitiveness when in nature, to an appreciation of the experience in itself and, eventually, to a recognition of the need for people to develop a relationship with nature. Both women and men spoke of changes having to do with connectedness, relationship and nurturing.

The influences which participants credited with affecting their views about the environment could be grouped into two main categories: experiences and people, with a few citations of the influences of books, television and radio, a composite of factors; and 'part of my nature'.

'Two kinds of experiences were reported frequently by participants'

Two kinds of experiences were reported frequently by participants: the first, experiences of seeing substantial environmental degradation or its potential; the second, strong experiences in nature, sometimes described as spiritual experiences. One man's awareness of global environmental issues was stimulated by a bicycle trip to an anti-nuclear rally when he was a teenager. Others spoke of observing environmental damage in Australia and abroad, of seeing forests destroyed, of fighting the wood chipping at Eden, of being on the periphery of the green movement, of concern about the Franklin Dam issue. Strong, usually positive, experiences in nature were influential. One woman talked of living on a boat for eight years; another spoke of staying out overnight in a small boat with her father. Adventures in the bush with friends as children were mentioned, as were stories of caring for animals, whether domestic or wild. People described spiritual or religious experiences in nature. A man told of the healing effect of walking up the butte near his home. A woman spoke of the time when she was 60, while alone on her first skiing trip, feeling that it was the most beautiful experience she had had, just listening to the calmness. A man spoke of hearing the inner voice of nature; another's "isolation pushed [him] straight into the arms of nature"

The influence of specific people on their views about nature was substantial for many participants. Parents, grandparents, teachers, Aboriginal people, neighbours, naturalists,

photographers, science writers, environmental activists-all were mentioned as influential. The headmaster in one woman's rural primary school used to take the children out to the bush; another woman who grew up in the city spoke of positive memories of picnics and bushwalks with her parents. One participant commented, "When I seek peace, I seek it in the bush; Dad planted the seed for that". Another remembered his mother explaining about not leaving orange peel in the bush; still another spoke of the strong influence of parental values of frugality. A woman who had worked with Aboriginal people was affected by their grief at the destruction of the land. The views of one person were influenced David Suzuki; another was affected by a Tasmanian photographer who covered the Lake Pedder protest. He added, "Seeing beautiful photography or seeing nature on the television does open people's hearts to respect the environment". The disillusionment of one man by a co-worker provoked his feelings for the environment, as related in this story:

There was this fellow I worked with in the office and one day I happened to ask him, this was in about 1985, I happened to ask him what he was doing and he said he's writing this letter to his local Minister of Parliament complaining about the tree-felling in Victoria and how he was totally outraged about this. And I said, "Wow, that's really admirable, that's a good thing to be doing, especially in your lunch hour, like what a nice bloke you are." And then he said, "Oh, no I'm not being a nice bloke, I just happen to have incredible, an incredible amount of ah, shares in a, in a forest company in South Australia, and I want them to actually ban logging in Victoria so that my shares actually increase in price." And then, here I am at age 30 being hit over the head by something I thought I knew when I was 18 and that is that, this was in a physical, like an affrontation to me, that "Uh oh, all is not what it seems here", ah, so that, yeah, that had a significant impact on me.

Most people were influenced positively by adults in their lives; as one person described it, "I am inspired by people who have achieved connectedness to nature".

Books influenced a number of participants. Adventure books, such as the works of Jules Verne, were mentioned by men as affecting their views; one explained, "Reading books left me with a deep longing for the outdoors". One woman spoke of gardening books as encouraging her relationship with the land. Radio and television were offered as influences by some participants. Two respondents spoke of the cumulative effect of a range of influences: "My views about nature", said one, "are a composite of what I've read and heard over 30 years" For the second, it was "The aggregate chipping away at you.until you have to decide to be in one camp or the other." This chipping away led to feelings which grew into a passion that had, for him, the force to change his lifestyle towards more and more simplicity. Finally, one person commented that one of the influences on his views about the environment was that "It must be my nature" to care about the Earth.

'What.....can be concluded.....about what had brought these 14 people to their views about the environment? '

What, then, can be concluded, even if tentatively, about what had brought these 14 people to their views about the environment? They spent much time as children outdoors, wandering and playing in the bush and natural open spaces. Many of them were distressed at seeing the environment degraded and destroyed. Many described having strong, often spiritual experiences in nature. Each could describe significant experiences, people, and/or media which had possibly affected their views. Beyond these commonalities, it was a unique series of influences.

A brief consideration of the literature to see how congruent these findings are with previous studies indicates that the results are a very good match to the studies by Tanner (1980) and Palmer (1993). Although I don't feel I can say it quite as definitively as does Joy Palmer, I agree generally with her that "The results confirmed Tanner's finding that childhood experience of the outdoors is the single most important factor in development of personal concern for the environment" (1993, pp. 29-30). The Environmental Life History study results are consistent with Wyman's 1985 observation that "There is a profound sense of dismay at the loss of familiar 'wild' places overtaken by development" A large study of Swiss citizens reported by Finger in 1994 concluded that "environmental behaviour appears to be mainly related to environmental experiences". These experiences in his study consisted of those with nature, in previous environmental activism, and ones involving exposure to environmental catastrophes. The results concur with Chawla's (1998) conclusion about the complexity of significant life experiences in relation to developing environmental sensitivity.

Upon reflection

'For [some].....further environmental learning substitutes for social environment action'

Yet a comment at the end of the Finger (1994) article began to raise the unsettled feelings I spoke of at the beginning of this paper. Finger proposed the possibility that "For this majority of Swiss further environmental learning substitutes for social environment action". It seemed that there was something more at play here. In a standard conclusion to a research report I would at this point have been detailing the obvious implications of the study: get children outdoors early to play in the bush as often as possible, and so on. But in plowing through my box of 'articles I really want to read one day' I found an article by Ian Robottom and Paul Hart from 1993, entitled 'Behaviourist environmental education research: environmentalism as individualism'. They argued that standard environmental education research makes assumptions about the purpose of education, treating it as if

the aim is to shape the behaviour of individuals to make them responsible towards the environment. Individuals should be responsible for putting into action solutions to environmental problems. They comment, however, that the problems are not 'done' by individual; the conflicts are cultural, large scale, and commercially based. We are told by educators to be responsible, then persuaded by well financed marketing strategies to be consumers. They continued that:

the language of behaviour modification [in environmental education research] contradicts one of the foremost aims of environmental education, or any education—the development of critical independent thinking

and

Environmental problems are not objectively existing physical phenomena amenable to reliable analysis and diagnosis. They are social constructions whose meaning and significance wax and wane according to changeable human interest. Fundamentally, environmental issues are political rather than technical in character. The majority involve 'quality of life' or 'social need' concerns and are settled through such processes as negotiation, maneuvering, persuasion, the offer of inducements, and the exertion of influence. Environmental issues are almost always political struggles, and collective action is usually more productive than individual efforts in the resolution of political struggles. . . .

We have examined the most visible approach to environmental education research—the behaviorist/applied science approach evident in research on responsible environmental behavior—in terms of its individualist ideology. We believe that this form of research focuses on the individual by pursuing personal variables that are thought to shape the individual's environmental behavior; that it rarely takes into account the historical, social, and political contexts within which the environmental acts of individuals and groups have meaning and significance; that it tends to create a sense of individual agency and responsibility that is unrealistic in light of a range of sociopolitical constraints in the community; and that it misrepresents the nature of environmental issues by emphasizing individual human agency as the key factor in issue resolution.

I then moved to a paper about method, one titled 'Life histories and the issue of voice: reflections on an emerging relationship' (Sparkes 1994). In it the author described a distinction that Goodson drew between "life stories, which are the stories we tell about our life, and life histories, which are collaborative ventures between research and teachers (in this case), where the crucial focus for life history work is to locate the teacher's own life story alongside a broader contextual analysis". Sparkes proposed, "One purpose of narrative

research is to have readers raise questions about their practices, their ways of knowing. The connecting of the individual stories to wider socio-political and economic issues via life histories [may have] an important role to play in assisting change".

"So", I asked myself, "what have I done, what has been left undone, and where to from here?" First I need to acknowledge the flaws in the research that I knew about before I wrote this report. As qualitative research, it needs more work on the analysis to be sure that I have done justice to what the participants in the study actually said. In gathering the data, I should have been much more involved in reviewing the interviews as each one was done so that some of the unevenness in asking similar questions across participants could have been detected while there was still time to fix it.

I also need to acknowledge that what I have reported is one set of stories prompted by a particular set of questions. Other questions might lead to other memories, other stories, other explanations. As well, I have not offered any information about the participants' social class or education levels. How helpful this study is may be limited if we're just talking about white middle class people who have had the resources and the cultural support to have access to outdoor experiences as children.

Where to from here in the research? I find myself skipping the implications for practice of these particular findings because I may have asked the wrong questions.

I'm interested in the question asked by Cherryholmes (1993) under the name of 'critical pragmatism'. What might be the consequences of the findings of our research? If I leave the reader with the simple findings set out above—a straightforward replication of the process by which people may develop positive attitudes and behaviours towards environments-I don't find the consequences healthy in the long term. We'll get more of the same, with even stronger calls for outdoor experiences in primary schools and at home. While it appears that there is nothing wrong with that in itself it misleads us into thinking the problem is solved and lulls us again with an individualist response to a cultural and social problem.

'I'm moving on from here, to ask some different questions'

So, I'm moving on from here, to ask some different questions. I'm not exactly sure what they are yet, but they have to do with the questions posed by E.F. Schumacher (1977), the British economist who wrote Small is Beautiful, which were along the lines of: "When we already know how to feed the world's population, and we have the technology and the resources to eradicate hunger-why don't we do it? When we have the technology to clean the environment and protect Earth's fragile lands, why don't we do it?"

The commentary; written by Almut Beringer

Environmental Life History research and its potential for healing the Earth

"Why don't we?" Perhaps because environmental education-research, theory and practice-has placed too much emphasis on the need for individualistic remedies to environmental deterioration. Perhaps because it has not sufficiently addressed the cultural and political-economic dimensions of the ecological crisis (cf. Beer & de Haan 1984, Fien 1997). Environmental education, it seems, is not achieving the cultural change which frames and determines individual behaviour. Underneath the question "Why don't we do it?" lurks this challenge: how can environmental education help overcome the assumptions of modern western culture that permit, if only implicitly, the neglect and degradation of nature for humans' sake?

cultural assumptionshave affected, and continue to affect our research and practice in often tacit, unrecognised ways'

Environmental education research which seems peripheral in this regard may provide important insights when considered from another viewpoint (cf. Finger 1994). While it may appear that the Environmental Life History (ELH) research is stuck in an individualistic analysis of the ecological crisis, a reframing of the ELH idea and the data may reveal its potential for healing our culture's silencing of nature. Through ELH healing can occur on the disciplinary level as well as on the level of individual disconnectedness with nature. In the following I take the ELH research project as a case study to explore how the notion of 'Earth healing/ecotherapy' versus 'environmental education' might contribute to our becoming conscious of cultural assumptions that have affected, and continue to affect our research and practice in often tacit, unrecognised ways. Deconstructing and re-framing the ELH research in such a way presents a thought-provoking sketch for a re-visioned qualitative research paradigm and methods. Within this re-conceptualisation the role of descriptive studies in environmental education, data collection and analysis, and the need for further research, will be discussed. Space does not permit me to reconsider all of the limitations of the ELH project as outlined in the research report above.

Descriptive studies as ecotherapy

Even after almost three decades of environmental education, there is a great need for descriptive studies in environmental and outdoor education, studies that give us a better understanding of our experiences in, with, and for nature, including our experiences of nature in semi-natural and built environments. The plethora of individualistic 'value-beliefattitude-behaviour' studies, inconclusive at best, need to be supplemented with qualitative-hermeneutic research to adequately and more comprehensively capture the richnessor depth-and diversity-or breadth-of human-nature interactions, both on an individual as well as a communal and (sub)cultural level.

There is, indeed, much need for repeat and follow-up studies within an individualistic framework. Nevertheless, environmental education also needs to look beyond such analyses, and towards research results which question the value of environmental education. We need to enquire more thoroughly into the disciplinary foundations of environmental education and how these affect research, theory and practice.

For instance, much of environmental education to date is caught in a psychology that has never recognised nature and the natural environment as a factor shaping the human psyche and human experience (Kidner 1994). Due to cultural biases implicit in mainstream psychology (Beringer 1992/1994, Kidner 1994), we understand very little about the humannature dynamic from a psychological perspective. This disciplinary blindness to the need for research into how the physical-ecological environment, natural or constructed, affects human development-self/identity/ego development, moral development, social development, or other aspects—has had at least one important consequence. It has led to environmental education building its theory and practice on human development theories that are skewed toward modern western values which are themselves causative in the ecological crisis (Beringer 1992/1994, cf. Barrows 1995). Therefore research like ELH, which seeks to understand human values, experience and development contextualised by the Earth, is fundamental. In addition and as an extension to ELH research, detailed investigations into the role of nature during particular life stages of humans is urgently needed.

'ecotherapy.....aims to heal the separation between humans and the Earth?

The fledging discipline of ecopsychology has attempted to correct the aforementioned ills; it seeks to fill the void in our notions of how nature impacts on the human psyche, and vice versa (cf. Roszak et al 1995, Winter 1996). Its application, ecotherapy (Clinebell 1996), seeks to heal the Earth by healing the human psyche, assimilating nature into conscious appreciation. By re-introducing nature into our collective consciousness, ecotherapy also aims to heal the separation between humans and the Earth which is one of the cultural dimensions of the ecological crisis.

Ecotherapy is a form of environmental education. A progressive environmental education, one which addressesd socio-cultural, political-economic as well as individual aspects of environmental deterioration, would benefit from adopting aspects of ecotherapy, as it is exemplarily described by Clinebell (1996).

Progressive environmental education research is research that seeks to rectify disciplinary misconceptions, particularly in eduction and psychology (cf. Bowers 1993, Bowers & Flinders 1990). In a sense this research is ecotherapy, not only because it aims to correct foundational assumptions. This is further the case because research as ecotherapy also seeks, while being instructive for the investigator, to be healing for

the participants. The hallmark of healing is service; research as ecotherapy strives to serve the participants in our research. In seeking that end we may find that we need to relinquish our own selfishly motivated quest for research outcomes. That is, any environmental education research that claims to be valuable-that is, worth doing and worth the money and time spent on the project-needs somehow to address the power differential which may exist between researcher and research participants regarding the (in)visibility of nature in our lives. While as researchers and practitioners we may be aware of how significantly nature has influenced our own lives, the participants in our research—and students in our classes may need help to bring this awareness into their conscious minds, from their unconscious or subconscious. In addition, research deemed valuable needs to somehow introduce nature as a crucial element into the behavioural and social sciences in general, and into the enquiry of the formation and dynamics of the human psyche in particular.

It is here that Environmental Life History research makes a contribution to both environmental education as well as ecopsychology. ELH research is valuable not so much because of its impact on theory—at least not at this stage—or even because of its effect on educational practice. Its value perhaps lies more in the process of doing the research itself. In that case it explodes our common conception of research being done to yield results-which interest primarily the researcher and the professional community-or, in more euphemistic terms, to further our understanding and contribute to the disciplinary body of knowledge. ELH, like other types of research, can focus on process—a process which is 'owned' more by the research participant than the principal investigator and/or the interviewer, as the diversity within the ELH interviews and interview questions attests. If we relinquish our own desires and need for control, for example by not sticking to a predesigned interview protocol, research can become service and, thereby, therapeutic. If research is onceived of as service we arrive at the point of doing research not for ourselves and the academic establishment, but for participants and for the Earth-by helping our interviewees make accessible those split-off parts of their psyche, those unconscious or subconscious memories of a connection with nature. From this perspective, ELH research becomes ecotherapy.

'participants were.....purposely selected because of their environmental activism and pronounced engagement with nature'

In this particular project, the participants were all what one can call 'environmentally conscious' and were purposely selected because of their environmental activism and pronounced engagement with nature. All of them understood the role and importance of nature in their own lives as well as to human functioning and survival of this planet in general. So the above argument about healing the individual and cultural psyche by bringing a sub- or unconscious 'nature' into a 'fuller view' holds only to the extent that 'silenced' nature stories were given voice via this project. The choice of environmentally aware and responsible individuals as research participants was made to 'test' the ELH approach—as yet in its infancy—and because it was most likely that these would yield 'results'. From the beginning of the project design it has always been the aim to expand into other populations, especially interviewing individuals who do not exhibit what we judge to be environmentally positive attitudes and lifestyles . The reported research, thus, is a pilot project for a database that is envisioned to grow and diversify in the future.

Despite the above disclaimer that healing may be more profound and perhaps more needed in those who do not accept nature as substantial in their lives, we found that healing occurred via this project, as many of the ELH interviewees reported spontaneously. In one instance an interviewee had never had the opportunity to share her grief about the loss of native forests; others had not recognised how important certain people or places had been in their lives and left the interview with a clearer sense of that; others found amongst fellow interviewees companions with whom to form an 'environment reading group' to discuss an emerging interest in environmental issues. As McLeod (1996) confirmed, the experience of telling a story to an interested and empathetic listener—relating the story of one's life contextualised by nature to an ELH researcher—can be profoundly healing. This is due to:

- experiencing being accepted and 'heard,' especially if the person has been silenced, shamed or if the experiences have been painful
- having the opportunity to discover a new perspective on one's life
- the releasing of emotion when the story is shared
- · accomplishing a sense of completion or resolution, and
- · discovering that others have similar stories which confirms one's own (McLeod 1996).

others experience the marginalisation of nature in similar ways'

A re-interpretation of the interviews from this vantage point of ecotherapy would be valuable to document in more detail where and how participants' healing occurred. For now stating that our 'living-with-nature' stories have been culturally suppressed will have to suffice; thus, we all have been silenced to some extent. For some of us a lifestyle chosen because of its closeness or 'closerness' to nature, and one based on ecological principles has resulted in being marginalised, or shamed, if not by our acquaintances then by the society in which we live. Being encouraged-and permitted-to tell our biography contextualised by nature can stimulate or affirm a new perspective and can be profoundly healing (cf. Clinebell 1996). This may be especially for those who have sought help in psychotherapy, which usually analyses biographies only from the socio-cultural and, more narrowly, from a family biography dimension, further cementing the bias toward a non-ecological isolated self. Feelings of anger, grief, despair,

disillusionment and so forth emerge when we are asked to reflect on the state of the environment. And just the fact that others experience the marginalisation of nature in similar ways can help us keep the vision of a 're-natured' psyche and psychology.

Being sensitive and committed to this healing effect of the interview process, the interviewer can be much more attuned to what the interviewees may gain from volunteering their time and information, rather than being dominated by what is required for the research. Interview research allows for such sensitivity to process; thus, at times, the quality of data may need to be compromised to respect the thoughts and feelings which may emerge in sharing one's life story. Unprepared for the depth of pain about the state of the world that would emerge in some of the interviews, I felt largely inadequate to counsel my interviewees to the point where we could proceed with the interview. In those instances adhering rigidly to the semi-clinical protocol and working to maintain the barrier between interviewee and researcher by holding back my own feelings and thoughts would have demanded violating my own human-ness and my suppressing the only appropriate reaction: a human being responding to another person in distress. Such is the beauty and power of qualitative research, which does not deny the human element.

'healing can occur on an individual level'

So, in the actual process of interviewing—collecting data healing can occur on an individual level. The data, and their analysis and interpretation as reported in the research report, contribute to healing on the disciplinary level; the data clearly show that nature is a factor in attitude formation and change, and that nature and the natural environment profoundly affect the human psyche and its dynamics. Furthermore, keeping in mind McLeod's descriptors above, a healing effect on the interviewer, if only subtle, can also not be denied.

In summary, then, ELH/biographical interviews can be healing as they ask us to recapture and reflect on the important, transformative events with nature in our past. We are given the opportunity to see our lives in and with nature as a completed narrative, with all the elements which characterise a good story—a beginning, transformative highlights (tension and suspense) and (temporary) resolution. The process of storytelling affirms our power to author our own life; it also allows us to imagine the future. In addition, ELH narratives not only illuminate an individual's psyche in relation to the natural world, but also how the ecological and socio-cultural conditions we find ourselves in shape us, in other words, how the world works through us.

Reconsidering the "limitations"

Having thus established and justified the value of descriptivehermeneutic ELH research for environmental education and (eco)psychology, I now want to focus on particular aspects of the project, including some that are described as "limitations" in the preceding research report.

The principal investigator not being involved in the data collection (interviewing) and the initial phase of data analysis (interview transcription)

The advantage of separating research design and analysis from the actual 'doing of research' becomes obvious in this deconstruction and re-conceptualisation of ELH research; an outsider's fresh perspective might highlight some of the tacit assumptions held by someone firmly rooted and engaged in disciplinary traditions and 'acceptable' ways of 'doing research'. In that sense team research can contribute to compensating for disciplinary oversights.

Lack of consistency in the interview protocol

'We.....need to be attuned to.....how the natural world is silenced in our research'

I have already briefly addressed above why I am not particularly concerned with the lack of a semi-structured interview protocol in all interviews, valuing healing over quality of data. Of graver concern to me than the discrepancy in the interview questions across interviews is missing the ecological context of the interview—not recording in more detail my impressions of the interview settings, in most cases the research participants' homes, and how the environmental values and worldview they were describing were reflected or not reflected in their immediate environments from their own perspectives, as well as from what I could sense. Some researchers have begun to acknowledge the effects of place and setting and to introduce their research reports with descriptions of where and how they met their research participants. I think this is a good practice. Qualitative studies need to be equally concerned with gauging the effect of the interview setting on the interview as they presently are with the interview protocol and effects of the researchers themselves on the data. We need to be attuned not only to power issues regarding gender, race, class, and so forth as the research report above acknowleges, but also to how the natural world is silenced in our research.

The number of research participants

The quality of description is the limitation in qualitative research, rather than the number of research participants. In ecopsychology we can learn much about the human psychenature connection from a case study with even only one research participant, given a rich and detailed description of a reflective life lived in close contact with nature and a thorough and thoughtful analysis of such a biography.

The replication of an individualistic, reductionist paradigm

The unconscious replication of an individualistic-reductionist paradigm highlights to me how entrenched are some of our conceptions of research and our understanding of humans and human experience. I suspect revising our conceptions of the human psyche may contribute to us being able to avoid such

paradigm traps. The distinction between values, beliefs and attitudes, so common in psychological research, is the main culprit here, simply because these are theoretical constructs devised for purposes of quantitative—that is, reductionist investigations that have no equivalent in lived experience. What is a value detached from an attitude? And how is a belief distinct from a value or even a feeling? Especially for qualitative research it would be much more appropriate to acknowledge that all of our thoughts are clouded by our feelings and vice versa. The human psyche is dynamic, the inner life a process; how, then, can we study the inner life appropriately? We can thus relate the inner life of the psyche to the outer life of behaviour and action, avoiding once and for all the dissection of the human psyche into psychological variables which have no place in qualitative research. And down the road we may perhaps even realise that inner and outer life are really only two manifestations of the same totality—lived experience, captured in narrative.

The implicit definition of psyche as mind

I suspect we will never know and understand the human psyche as long as we restrict our interpretation of it to the cognitive, affective and conative domains. Only when we return to the literal and original meaning of psyche as soul, and include the spiritual dimension in our studies of the inner life, will we truly understand the richness and diversity of human experience in and with nature that we seek. In doing so we would give ecopsychology and environmental education leverage in healing the spiritual and consciousness dimensions of the environmental crisis.

Reflections on data collection, analysis and presentation

'ELH as ecotherapy.....challenges us to invent techniques and formats which increase their therapeutic potential.'

If we commit ourselves to realising the healing potential of ELH research we need to be prepared to balance the quality of data with service rendered. By placing data collection, analysis and interpretation into an ecotherapy framework we may lose some consistency, but may gain notions of psychenature connections. ELH as ecotherapy necessitates questioning the appropriateness of conventional qualitative analysis and interpretation, and challenges us to invent techniques and formats which increase their therapeutic potential.

Data collection

Good stories, it seems, can best emerge from uninterrupted reflection, from story-telling undisturbed by the researcher's objectives. As the story unfolds the interviewer occasionally asks questions which stimulate interviewees to venture into further depth in their stories, or which keep them focused on the topic, rather than satisfying the needs of the researcher to 'stick to protocol' and to collect information relevant to their purposes. The research participant's story is ultimately more important than any particular interview question, and the researcher is guided more by the clues the participant provides in relation to the topic of study rather than by preconceptions contained in the interview protocol. Each interview will be as unique as the life story that underlies it. This, of course, makes the data 'messy' when perceived in the conventional mode of qualitative analysis; knowing the imminence of data analysis the researcher is caught, if only unconsciously, selecting information—'making data'—that fits the project.

'listening with the heart'

Having been trained to listen for similarities, differences and contradictions amongst and between interviewees, the qualitative researcher runs the risk of finding the mind closed in the sense of not being fully attentive to what is being shared. Listening has been framed by the interview protocol. Biography is pressed into a template, a template created by the researcher and their protocol. Listening with a pre-structured mind is focused on "What question do I ask next?" rather than listening with the heart to the story, asking follow-up questions which flow from the biography itself. What may seem digressions and irrelevant side avenues then become the most important elements of a unique narrative.

The story's ecological context is important, too. Time, place, participants' mood and so on frame the narrative; as researchers we're aware that on another day, even at a different hour, in a different setting, with a different mood the story we hear would be different. Only with this kind of engagement can we become immersed in the other's reality, rather than using their reality for our own ends.

What I am advocating in ELH research, then, is to engage as much as possible in the complete story as told by the interviewee. The interviewees should speak for themselves as much as possible; as researchers we merely provide guidelines and a framework for understanding and deriving our own personal meaning from the narratives. In that way, we empower not only the research participant, but also the research consumer.

Data analysis

The approach taught in qualitative research consists of compiling a list via thematic content analysis of formative factors and influences toward a positive relationship with nature and our attitudes about the outdoors is. However, I sense the more interviews are conducted, and the more diverse the research participants' background, the longer such a list is likely to become, despite overlap and categorisation, and the less it will say much at all. The research runs the risk of being rendered meaningless.

'Cut-and-paste' thematic content analysis doesn't do much in helping us understand the nature of our experiences with and in the outdoors, as thematic content analysis segments the life story into pieces. 'Cut-and-paste' literally takes the life out of each unique biography—it destroys it. Intricacies and complexities of pro-environment attitudes, lifestyles and self-definition are lost. Thus, we learn little about the dynamics of attitude formation and change. In trying to understand the psyche this form of analysis is depersonalising—desouling—not only for the individual, but also for the world. What does it help us to be able to articulate and categorise 'factors influential in forming positive environmental values,' to stay with the ELH example, if neither the factors nor the values are attached to a living being, a person interacting with the world, affecting it and being affected by it? Such factors, viewed in isolation from a living being, an animate psyche, will contribute little in our making sense of and nurturing an ecological self, a self developing in relation to the natural and constructed world.

In essence, 'cut-and paste' qualitative analyses corroborate the deplored reductionism often found in quantitative studies. Furthermore, thematic content analysis abstracts and runs the risk of generalising to such an extent that it offers little in illuminating human development in general, and the growth and deepening of pro-environment attitudes in particular. After all, there is no 'average, model' person to whom such a generalised process would apply. This is especially crucial to consider given the finding that human development theories tend to shape actual human development.

'Human-nature dynamics.....can only be understood in life'

I sense that proceeding with such conventional thematic analysis in ELH research may do more damage than good. Human-nature dynamics, I suspect, can only be understood in life, that is via interpretation of narratives of lived experience, not accounts devoid of context and abstracted from life. The interviewees teach us not by abstraction, but by their living examples and their life images or bio-graphics. Our learning from them occurs not through what we, as researchers and consumers of research, take away from the edited text or the interview interpretation, but through immersing ourselves, our self, in the text of their narrative in a living way.

To respect the beauty and power of ELH research in particular, and biographical research in general, we need to find more conducive means of analysis, ones that do not destroy narrative, that do not take away the storied essence and way of making sense and creating meaning. Put differently, we need to find an analytic technique and a way of presenting our learning to the professional community and public where the data collection is congruent not only with the topic of study but also with the mode of knowing which research participants are asked to engage in. A narrative mode of knowing is the primary means of how we find meaning in the world (Bruner 1986); thus, a narrative mode of analysis and presentation should be the primary means of documenting and sharing ELH research. Conventional qualitative thematic 'cut-and paste' analysis compromises the narrative mode of knowing in favour of an analytical-paradigmatic way of knowing (cf. Bruner 1986), which is another of the cultural assumptions that have brought us into ecological disaster.

Data presentation: bio-graphics, homology and analogy

'like a catalogue to an art exhibition'

As an alternative, and in contrast, we can envision a research report on ELH as more like a catalogue to an art exhibition. The paintings exhibited are the bio-graphics the interviewees have supplied, their storied life-images of their relationship with nature. The researcher becomes the art curator, displaying the bio-graphics with as little editing as necessary and selecting where each bio-graphic is placed in the report to yield the highest potential for comparative analysis in ways briefly discussed below. In addition, the researcher writes the catalogue to the exhibition, thus conceptually framing the ELH narratives which helps the visitosr to place the paintings in time and place, but does not relieve them of the act of viewing the paintings themselves. The narratives, or paintings, speak for themselves; the research analysis, or catalogue, places these stories in time and place as 'historied and placed narratives'. Translated, the researcher places the ELH narratives in a conceptual framework and helps the readers/research consumers learn with and from the stories.

How the particular bio-graphics are juxtaposed with each other in the research report is determined by the researcher. Their intent in placing each narrative arises from the research findings, which the researcher unearths from the interviews. In this form of presentation the researcher as well as the reader are led away from an analytic into a comparative mode of analysis, which is not reductionistic. The researcher chooses particular ELH narratives, or sections thereof, to highlight an insight, or insights, regarding the topic of study gleaned from the participant's life experience.

We do need to approach the reading of such bio-graphics with our analytic-paradigmatic mind. In fact, we can not avoid doing so as the research questions are the lenses which focus our reading of bio-graphics. But we can purposely stimulate the narrative mind, our own as well as that of our readers, by attention to homology and analogy between the narratives. Gleaned from evolutionary biology, homology asks, "How have different life circumstances led to similar attitudes and values toward the environment?" Analogy asks, "How has a similar background/upbringing led to potentially different worldviews?" This comparative mode of analysis not only asks us to compare life stories, in as much detail and depth as possible, between interviews but also asks us to compare this with what is revealed within our own life. Both homology and analogy have the potential to extend the reader's own range of responses to nature and the world. I suspect one cannot avoid being changed, if only subtly, by reading other's life stories just as one does not leave an art gallery unchanged. Obviously, such a research report would take innovative forms of research reporting, or would take book or monograph format (cf. Hancock 1989).

The 'ecological self': paradigm subversion in psychology and the focus of further ELH research

Examining the influences that help us develop a relationship with nature and which affect our attitudes toward the outdoors,

as the ELH project set out to do, is one way to contribute to the shifting paradigm in psychology, "away from a bounded. isolated self toward a vision of a self that is permeable. interconnected not only with other human selves but with all living beings and processes..." (Barrows 1995—p. 103, Kidner 1998). Environmental education, in attempting to restore our culture's connection with the natural world, is presently based on psychological theories biased toward urban settings and written by urban theorists (Barrows 1995). Research into the intra- and inter-psyche dynamics of the formation and change of environmental values throughout the lifespan is, therefore, timely and urgently needed. Many of the ELH research participants exhibited elements of such a porous, related. ecological self—a self open to the pain of the world, willing to make personal sacrifices for the Earth and others.

Research on the 'ecological self' should not only investigate the factors and influences that awaken this ecological self inherent in each of us and the conditions which promote its growth and development, as discussed in the ELH research report, but should also raise awareness about how the potential to connect with the natural world around us withers. The ELH data suggest that social pressures in adolescence seem to be a prevalent factor here; if that is so, and commitment to the natural world emerges again later in life, the influences which undermine as well as strengthen the "porous permeable sensitive essence" (Barrows 1995) in this life stage need to be further explored. Future research needs to focus specifically on the dynamics of environmental attitudes in adolescence; 'going underground,' as Gilligan et al (1990) found for adolescent girls in relation to feminist values, seems to be a possible explanation. If, indeed, environmental values are subdued in favour of peer acceptance, how can environmental education address young people's concerns for both?

Even if read in the spirit of ecopsychology in general, and the ecopsychology of child development in particular, ELH research provides only an incomplete and thus skewed picture towards our attempting to understand how the natural world works on our psyches. The ultimate step forward in recognising that, indeed, the natural world and the built environment have an effect on the human psyche—on our consciousness and our soul—is to accept that the world itself has a psyche, a consciousness and a soul. Just as the belief that the Earth is a living organism is an ancient idea which found its scientific resurrection through James Lovelock's (1979) Gaia hypothesis, so are we now on the verge of accepting, through writers such a James Hillman (1996), Robert Sardello (1994) and others, what geomancy and tribal wisdom have long known—that the Earth itself has a psyche. As long as research, theory and education bypass the concept of a soulfor both individuals and the world at large—we will fail to understand the full dynamics of why certain individuals and some cultures more so than others are drawn to caring for the natural world (cf. Sardello 1994).

Conclusion—to both parts of the paper

The research report regretted that the ELH project might be part of the problem in environmental education rather than part of the solution—the overcoming of a reductionist, individualistic worldview as a cultural dimension of the ecological crisis. This assessment could lead one to conclude that the ELH project failed its potential as a critique, as political activity, in the disciplines it touches which include:

- psychology—where the notion of a separate self has until very recently undermined the biological fact that we are an interdependent part of the Earth (cf. Kidner 1994, Kidner 1998, Roszak et al. 1995)
- education—where so much of what we are subjected to as learners turns out to be only marginally relevant to creating meaning in a life contextualised by ecocide
- environmental education—where questions into how the natural world affects the human psyche would seem to be fundamental, but where the research literature is poor at best.

Yet to judge the research only in that light would do it injustice. The disillusionment and concern voiced in reflection on the research report have thrown us back to three questions, the first fundamental to any qualitative research, the second particular to this project, the third a demon plaguing every author:

- 1. How, as researchers, can we avoid perpetuating cementing our own and disciplinary biases and values in qualitative research, in the design, in the questions we ask, the data we collect, and in the interpretation of these data? In essence, how can we step out of the implicit assumptions we harbour due to the very fact that we are insiders in both our disciplines as well as in our research paradigm? Caught in our own unconscious, how can we gain an outsider's perspective and hereby, reveal and correct some of these assumptions?
- -2. Why collect and analyse biographies?
- 3. Why publish this particular project, especially if we accept its limitations?

'ELH....is powerful in progressing environmental education research and ecopsychology'

The idea of ELH, as the commentary on the ELH research demonstrates, is powerful in progressing environmental education research and ecopsychology. If anything the concept of ELH research has offered points of departure for an alternative framing of qualitative research, one sorely lacking in environmental education. What this project has done perhaps most of all is to help firm up the philosophical foundation of ELH research, and in that it has opened up avenues for further studies.

The two alternative framings of ELH provided above give evidence of what may happen when we let research work in us, allowing there to occur the kind of critical engagement, not only with the data, but also with the approach and underlying philosophy of the research, which was only possible with distance in time. Such reflexivity might lead to changes in consciousness as our biases, at first unconscious, rise to the surface, expanding our understanding and leading to our growth as researchers.

The concept of research as service, and the notion of interviewing as healing therapy are perspectives that take us beyond participatory research and action research, and beyond interviewing as giving voice to what has been culturally silenced and oppressed. As such, ELH research can be regarded as innovative as well as progressive, and it can nurture future qualitative research in environmental education and ecopsychology which can be measured against its standards. We conclude by asking, plainly, "Why cannot all qualitative research be service-oriented and healing for individuals, academic disciplines, cultures, and the Earth?" We suggest that this is the question any qualitative research in environmental education and ecopsychology will have to confront.

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Almut Beringer and Mary Faeth Chenery work in the Department of Outdoor Education and Nature Tourism at La Trobe University, Bendigo.

Almut lectures in environmental studies, her main environmental education research interest being in ecopsychology, particularly in revising human development theories to include nature as a force shaping experience, learning, and growth.

Mary Faeth teaches in the areas of evaluation of outdoor and environmental programs, nature writing and journal keeping, and qualitative research methods. Her research interests have to do with identifying and changing cultural influences on environmental behaviour, as well as with understanding the dynamics of youth development as it occurs through organised camping.