European Journal of Ecopsychology
(ISN 2040-4204)

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The power of place: Protest site pagans

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Abstract

My fieldwork with activists living on UK protest camps revealed the impact of spending extended periods of time in the organic environment. The wilderness effect – previously described in the context of US treks in places like the Grand Canyon – was apparent even in comparatively urban environments and catalysed a spiritual emergence for several people. I begin by explaining the context of protest site activism and spirituality. I then draw on my fieldwork to describe how key aspects of the wilderness effect were expressed on UK protest sites and discuss some of the life changing experiences catalysed by the effect. I then outline my model of embodied situated cognition and use it to provide a partial explanation for how the wilderness effect works.

Introduction

Research has established that “participation in activities based in wilderness and wilderness-like settings can have profound effects on both groups and individuals” (Ewert & McAvoy, 2000: 13); this phenomena is often referred to as the “wilderness effect” (Greenway, 1995). The impact of the wilderness effect is usually observed during extended wilderness trips, but I present evidence that Eco-Pagan campaigners living in small pockets of natural space are also deeply affected.

Although contemporary Paganism is often described as a “nature religion” (Pearson, Roberts & Samuel, 1998: 1), environmentally active Pagans are in “a minority” (Davy, 2004: 90) and ethnographic reports reveal “more emphasis on ritual ... than a connection, or interest even, in the environment” (Greenwood, 2005: 175). However, the term “eco-paganism” has emerged to describe earth-
based "spiritualities within the British protest movement" (Letcher, 2005: 556). Worthington claims that “[f]rom the beginning the road protesters demonstrated a raw, untutored form of grass-roots eco-paganism that went further than any previous protest movement in embracing the land as sacred” (Worthington, 2005: 214), while Butler (2003: 386) noted how “various expressions of 'spirituality’” united the otherwise diverse protesters at Claremont Road¹. Although many protesters wouldn’t call themselves “Pagan”, boundaries blur between Eco-Pagan² and protester. A “Pagan discourse” underlies the protest movement (Letcher, 2000), and Plows confirms that a “sense of connectedness” is part of “a fairly ‘standard’ activist spirituality” which she describes as “practical paganism” (Plows, 1998: 209). Taylor asserts that the US radical environmental movement “can aptly be labelled ‘pagan environmentalism’”, and notes that each issue of the US Earth First! activist journal is dated by Pagan festivals (Taylor, 2001: 178). Given this context, I describe several of my participants as Eco-Pagans on the basis of their beliefs and practices even though they did not adopt that title themselves.

Some environmental activists spend months – or even years – living on protest camps. Because many of these camps are a response to schemes that threaten a specific organic environment, they are often on rural or wooded land; the Twyford Down³ and Newbury⁴ campaigns are notable examples. Protesters live in simple shelters called “benders” or tree houses and must be forcibly evicted before environmental destruction can take place.

The are many factors which lead protesters to spend months living in conditions which are at best basic and frequently uncomfortable or dangerous. Their dedication to the preservation of the environment is rarely grounded in intellectual considerations, although most are well aware of the factual arguments. More

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¹ Claremont Road was a key site of protest during the M11 Link Road campaign. Protesters were evicted in November 1995.

² Usage varies, but following Clysdale (2004: 86) I capitalise the term Eco-Pagan throughout.

³ Twyford Down (Hampshire) was the site of a celebrated UK road protest campaign in the early 1990s. The motorway extension through the Down destroyed two Sites of Special Scientific Interest, two Scheduled Ancient Monuments & an Area of Outstanding Natural Beauty.

⁴ The Newbury bypass (Berkshire) was built during 1996 in the face of stiff resistance with over 1,000 people arrested and a policing bill of £26 million.
important is an embodied knowing grounded in their relationship with the places they defend. My fieldwork (below) will illustrate how that embodied knowing can be understood as an aspect of the wilderness effect.

Notions of embodied knowing have been discussed across many disciplines: the philosopher Merleau-Ponty refers to a “knowledge in the hands, which is forthcoming only when bodily effort is made” (Merleau-Ponty, 1962: 144); sociologist Burkitt claims that “[a]ll knowledge is embodied and situated” (Burkitt, 1999: 74), and in an earlier article I refer to “somatic, physical knowing ... [that] is the knowledge of faith, of emotion, of the gut feeling” (Harris, 1996: 151). Cognitive neuroscience prefers the term “embodied cognition” and the second generation of this interdisciplinary field “begins with the realization that the body … grounds and shapes human cognition” (Rohrer, 2007: 21-22).

A consensus has emerged that embodied knowing/cognition is largely non-verbal and pre-reflective and fundamentally tied in with location; it is situated. Perhaps most significantly for this discussion, embodied knowing/cognition reveals an integration between what we conventionally understand as “self” and “world”. Despite this consensus, work to weave the many disciplinary stands into a coherent pattern has barely begun. Later in this article I outline my own attempt to integrate the current research; I then use that model to interpret the fieldwork results I present below.

Because of the intimate relationship between “self” and “world”, place has a profound impact on our embodied knowing, and through that our entire being-in-the-world. I identified six processes which create a sense of connection to the organic environment, all of which are grounded in embodied knowing. The wilderness effect is the most powerful of these, so though I occasionally refer to other processes of connection, I focus on that here.

Terminology

Embodied situated cognition and embodied knowing are perspectives on a single complex phenomenon that cannot be adequately understood from either viewpoint.

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5 These are: the wilderness effect (and similar intimate experiences of the organic environment), the felt sense (Gendlin, 1978), ritual (broadly defined), deep trance, meditation and entheogens. Sex is also a powerful processes of connection and I do not suggest that this list is complete.
alone. A dance serves as a useful metaphor: we can analyse the choreography, music and physical execution of a dance, but this can't tell us how it *feels* to perform or watch it. Similarly we can interview the dancers, the audience and perhaps dance the steps ourselves, but we still won't understand how and why the choreography is effective. I thus adopt two complementary perspectives throughout: one focused on the phenomenological and experiential intimacy of embodied *knowing* and the other on the physiological body engaged in embodied situated *cognition*. My experiential analysis draws primarily on phenomenology and anthropology, while my more physiological perspective focuses on the cognitive science of embodied situated cognition.

**Methodology**

My involvement with the environmental protest movement spans over fifteen years and I was involved at the UK's first road protest camp at Twyford Down (1991-1994), the London M11 link road protest (1993-1995) and Newbury (1995-1996). This background gave me an understanding of protest site activism and helped build rapport with research participants. I have identified as an Eco-Pagan since at least 1990 and my insider status enabled a more empathetic approach to this research.

Participants were selected on the basis of practice and belief as much as self-identification as Eco-Pagans. Some participants resisted any attempt to define – and thereby limit – their spirituality, but did acknowledge “Paganism” as a suitable label for core aspects of their spirituality. Because there are very few protest camps in the UK at any one time, my ethnographic sample was self-limiting. I visited all of the then active protest sites in England, Scotland and Wales (2004-2007), and spent between a few days and several months at five of them. Most of the camps were in small areas of mainly deciduous woodland, usually on the edge of a town. Camp B was my primary research site; I lived on-site full-time for three months (over winter 27/10/05) and spent approximately another six months there part-time. Camp B was unusual in that it was on a narrow strip of land which was part of a local park, but the patterns I found were apparent at every other site I visited.

Camp B was also notable in that it included an ancient burial site. The presence of

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6 Camps are named alphabetically in the order I first visited them to preserve the anonymity of my participants.
the burial was significant for all the protesters there, if only for its tactical value to
the campaign, but most people came and stayed for the sake of the natural
environment. Eco-Pagans stress their relationship to what is local (Taylor, 2001)
and have little interest in culturally identified sacred sites like Avebury,
Glastonbury and Stonehenge. This is not typical of mainstream Paganism (Harvey,
2000: 159), but further discussion of why that might be lies beyond the scope of
this article.

My research drew on existing ethnographic work (inter alia, Anderson, 2004;
biographical accounts by activists (Hindle, 2006; Merrick, 1996; Plows, 2001),
interviews, participant observation and my own autoethnography (Harris, 2008).
Action Research (Reason & Rowan, 1981) and feminist methodologies (Harding,
1987) were influential on my methodology and I refer to those I interviewed as
research participants in recognition of the collaborative approach I adopted.

I interpret this ethnographic material using my own model of embodied situated
cognition which I call the enactive process model because it draws primarily on a
cognitive neuroscience approach called enactivism (inter alia, Varela et al., 1991),
and Gendlin's process philosophy (Gendlin, 1997). I explain this model and its
context in a later section of this article.

The Wilderness Effect

Extensive research has shown that spending extended periods in the “wilderness”
can have a profound impact on the psyche (inter alia, Greenway, 1995; Shaw,
2006; Key, 2003: 65). Changes engendered by what is widely known as “the
wilderness effect” include a deeper connection to the environment and other
All research into the wilderness effect concurs with Greenway that it has a
“spiritual” dimension (Greenway, 1995: 128), and Key points out that there are
“many examples” of spiritual experiences catalysed by wilderness (Key, 2003: 65).

To date the wilderness effect has only been noted in the context of extended
wilderness trips, but ecopsychologists agree that “simply spending meaningful time
communing with nature” (Shaw, 2006) is beneficial, and the full effect is a
difference of degree rather than a difference in kind (Greenway, 1995: 132). We
would therefore expect that long periods in less than pristine wilderness would have a similar impact to short, intense wilderness exposure. My fieldwork shows that this is indeed the case, and most of the key aspects of the wilderness effect correlate closely with lived experience on a protest camp site: viz. a sense of deeper connection, a feeling of freedom and spiritual experiences.

The effect was first noted on North American wilderness treks and there are some fundamental differences between such treks and life on a protest camp. In most cases, the motives of those joining a wilderness trek will differ from those of protest site activists: wilderness trips are generally focused on personal therapeutic goals and any human-nature connection is a bonus (Baillie, 2006). As Shaw points out, there “is no guarantee that this process will lead directly or indirectly to environmental action” (Shaw, 2006). Clearly spending time in an organic environment does not inevitably make us more environmentally aware, but there is evidence that the wilderness effect can inspire and support activism (see “Motivation and the wilderness effect”, below).

I will now consider in more detail how key aspects of the wilderness effect – a sense of freedom, feelings of deeper connection, a distinct sense of self and spiritual experiences – were expressed on protest sites.

**Freedom**

Greenway describes the sense of freedom felt by those on a wilderness trek: “For many the wilderness experience means release of repression – release of the inevitable controls that exist in any culture” (Greenway, 1995: 128) and protest site campaigners commonly describe a similar feeling of freedom. My Camp B field notes of 12/12/05 attempt to put it into words:

> I can’t quite describe it, but have an image of Camp [B] as like a bubble, an enclosed safe, crazy-sane place. It’s a bit like ELFS actually – that same feeling of liminality, of freedom to be who you are, of safety and possibility.

Visitors often referred to the camp as a place “of freedom” as opposed to the world outside (quote from a visitor, field notes, 12/03/06, Camp B) and Merrick, a protester at Newbury, explains how that feeling of freedom allows for self-

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7 ELFS is a annual week long Wiccan camp. I have changed the name for ethical reasons.
expression:

Not all far-gone behaviour is actually craziness; a lot of it is the release of tension that, in the outside world, people would be too inhibited to express (Merrick, 1996: 80).

Again my ethnography bears this out. In a discussion over breakfast, Jan,⁸ who had previous experience of camp life and had lived at Camp B for about two months said: “I feel free here. I’m back to being myself”. Debbie, who had been at Camp B for about a month and who had also lived on a site before, responded that being there allowed her to “be who I really am”. She commented that her partner had ruefully said she had “the site bug again”. Jan went on to say that at the Camp she did things she didn’t normally do because she’s otherwise too shy, and added: “I don’t know who I am. When I’m here everyone knows who I am and it’s really affirming” (field notes, 14/11/06, Camp B).

**Connection**

For Greenway connection – or reconnection – is fundamental to the wilderness effect: “When entering the wilderness psychologically as well as physically, participants most often speak of feelings of expansion or reconnection” (Greenway, 1995: 128). A sense of connection lies at the heart of Eco-Paganism: one Eco-Pagan (Rob) explained that his “connection with the earth” had become “a major part” of who he is, while another (Jan) expressed it very explicitly: “That’s what Paganism is all about – connection with everything” (field notes, 11/10/05, Camp B).

Protest site activists typically build bender tents for living accommodation. These are constructed from flexible branches which are bent over and pushed into the ground. This structure is then covered with canvas and insulated with a layer of blankets or carpet. Living in a bender provides an intimate connection with the immediate environment which is why Eco-Pagan Ray doesn't “want to live in a house, ever again”:

> in a house [...] you're just sealed off [holds hands up palm to palm in front of his head] from any – anything that could possibly connect with outside of it you know? Other than probably another box which is the television. Like you don't realise it until – well I didn't realise until I had the opportunity to live outside in a bender. [...] you hear the birds when you wake up in the

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⁸ The names of participants have been changed unless otherwise noted.
morning and that's nice. [...] Sometimes you'll hear a wasp fly by or something [...] you kind of connect with what's outside of it, a bit more than you would in a normal home.

Ian had been living on protest sites for many months when I met him, and I asked if it felt different when he was in the woods. He smiled and said:

Does it feel different? No, it feels different when I'm not – when I'm in a box or on a street. That's when it feels different.

Similar experiences are described in autobiographical accounts of protest site life. Newbury activist Jim Hindle describes how he became accustomed to the sound of the wind in the trees at all times. It wasn't a thing I necessarily listened to, but the silence that fell whenever I stepped inside a building was eerie and disquietening. ... It was like being connected to a great river, the source of all life ... and years of separation between us and the Land were falling away like an old skin (Hindle, 2006: 70-71).

This sense of connection often had a practical expression. Previous ethnographies described different degrees of environmental sensitivity amongst site Eco-Pagans, contrasting the respectful “practical paganism” of Twyford Down (Plows, 2001) with the insensitive rituals Letcher observed at Newbury (Letcher, 2001b). My own ethnographic research, which was more extensive than Letcher's, concurs with Plows, and I observed elements of Permaculture, extensive recycling and considerable sensitively to local ecology amongst protest site Eco-Pagans.

Protest camp life has one significant extra factor which a wilderness trek lacks: those who live on the site are protecting it, and this enhances the sense of connection. As Jo explained:

you're giving your life over to try and protect that piece of land, so you have a more intimate relationship than you would, somewhere else [...] you've got that bond that you're trying to protect it, and I think it knows that you're trying to protect it, and it's your land because it's your home as well, and it's the home of the people that you share your life with.

Anderson notes that everyday life on a protest site creates "ties between self and place", at least partly because of "heightened awareness of the local environment's agency", which "ties participants closer to their cosmological value systems as they experience at first hand unmediated positioning with a broader ecological system" (Anderson, 2004: 51). As Letcher says: “The very act of living out, however
dependent on wider society for food and so on, puts one in touch with nature in a way that is real, not virtual” (Letcher, 2000).

Several researchers have noted that the wilderness experience enhances sensory acuity (McDonald & Schreyer, 1991; Beck, 1987; Harper, 1995; Sewall, 1995) and this is apparent in my interview with Eco-Pagan Rob. In the city he has to engage sensory filters to “block out information, to block out noise, to block out the chatter of things [...] going into your mind, because if not you’ll go absolutely insane because there’s just so much going on…” On returning to a more natural space he would find the silence overwhelming and “it was so goddam quiet it almost hurt”, but this passed:

And it was only when you actually started to listen that you realised it wasn’t quiet at all but the river was flowing, the wind was in the trees, the birds flying. All of these things were going on which we weren’t hearing because we had these filters on. And I keep repeating it but it’s an important point, because people do live their entire lives in an urban environment and they just don’t get the connection, um they don’t get that connection with nature.

Many participants contrasted the connectedness they felt in the organic environment with what they perceived as the alienating effect of urban life. Lauren compared her old lifestyle with how she lived now:

It is very difficult when you come from this world, of time and meetings and writing things down. You get right out of touch with yourself.

After over a year living at various camps, Dave concluded that when we "shed all [the] stuff" of conventional life "it definitely lets the spiritual side of yourself come out". Ray concurs with Dave's conclusion:

in this day and age it's just taken away from you [...] your mind's just filled with so much other stuff – well, crap basically [...]. No-ones really in touch with what they actually are or anything, or life. [...] And if you start talking about, you know, the wind and the earth and the fire and the stars people just start laughing at ya [chuckles].

Several participants believed that this lack of understanding is endemic to Western life:

Sitting round the fire pit [...] explaining my research to Ian. Others chipped in. Ben said (approx): "It's blatantly all connected. If you can't see that it's just because you're closed down – conditioned" (field notes, 06/09/06).
Ian lamented that “We are bred not to get it”, while Adam told me that we are taught “from the womb” that “this is the way to live”, and social reinforcement is all around us “like smoke”. Adam contrasted this “psychic pollution” with a sense of “peace” that comes from being “grounded” in the embodied way of knowing that he feels in his stomach.

These descriptions of how a life closer to nature can open us to a deeper understanding are echoed in Greenway’s suggestion that the wilderness effect enables a “de-conditioning of cultural programs” (Greenway, 1997: 16). As we can see from the narratives above, this experience can be “a heavy shake-up: one's perception, dreams, perspective, awareness vividly and rapidly changes” potentially “to the point where people become more or less incapacitated when they return to their normal lives” (Greenway, personal communication). In fact, the return to civilization after a wilderness experience “is almost always a painful experience” (Greenway, 1995: 133) and the wilderness effect can place “the individual in more or less severe conflict with [urban] culture” (Greenway, 1995: 128).

Experiences of deep connection often illustrate the insight from cognitive neuroscience that “organism and environment enfold into each other” (Varela et al., 1991: 217). Rob described how he felt one evening in the woods when a deep realisation of environmental destruction came to him:

I felt like Gaia was really screaming out through me, saying please help me. Please help me, and like I started screaming myself and started saying these words. I felt so connected, so at one with the earth that this violence was being done towards me. Um, not me personally, any ego or anything like that, but me as in life, as in this whole unity which I’m connected with.

His identification with a sense of life itself, which is emphatically not his ego, is particularly striking and recalls Greenway's conclusion that the wilderness effect and other processes of connection "facilitate the arousal of nonegoic awareness" (Greenway, 1995: 133). As we have seen such experiences are not uncommon. Taylor found that “no small number of activists report profound experiences of connection to the Earth and its lifeforms” (Taylor, 2005: 47) while Eco-Pagan Jodie concluded that life in a camp constructed “a different form of consciousness whereby a person a felt a part of nature” (Greenwood, 2005: 107).

Several factors contribute to this sense of connection, including meditation, ritual,
the use of entheogens⁹ and the wilderness effect. Although I focus on the wilderness effect here, there is a complex relationship between these different processes of connection. Greenway claims that “both the psychedelic and meditation experiences ... closely parallel” the experience of the wilderness effect, and that such awareness seems to have the “capacity to open consciousness to Mind – that is, to the more natural flows of information from nature” (Greenway, 1995: 132).

**Sense of Self**

The wilderness effect creates a distinct sense of self:

> People often are quite explicit about how their minds feel 'open' and 'airy' in the wilderness, as contrasted with 'turgid,' 'tight,' and 'crowded' in urban culture (Greenway, 1995: 132).

Anderson's field notes describe how it felt to live on site: “I get a slowed down, rhythmic feeling in the woods and on the meadow, relaxed” (Anderson, 2004: 51). Site life gave him “a sense of possibility, a blast of fresh air, oxygen rushing to the brain. These protests ... are like stepping into a parallel universe” (Anderson, 2004: 51). My own field notes echo Anderson's: “Feeling about being on site: Lightness, sense of openness” (field notes, 1/12/05, Camp B). I became especially aware of this sense when I left camp for a couple of days for a trip to London:

> On the tube I feel more enclosed, less emotionally open, more restricted. We talk about urban congestion. It’s not just roads that are congested – it’s *psyches* (field notes, 4/11/05, Camp B).

Later I expressed a similar feeling as I left camp to travel by train to London:

> As I sat down in this warm, enclosed space I felt odd – slightly shocked somehow. Now a few minutes later, it still feels strangely alien. Straight lines hard consistent surfaces. Ordered space. I feel shut away. I remember sensing a similar difference between cycling and being in a car: on a bike you’re connected, part of the space you move through. In a car you’re enclosed in a discrete space. I think that’s the key to the difference. [...] the inside and outside are less defined. Even in my bender it’s very obvious what the weather is like! There are no doors, very few straight lines and no order. The space is more open, inconsistent, and fluid. Sometimes it has an organic quality inspired by the materials; my bender is a dome, shaped purely by the relationship between bent hornbeam and the space (field notes, 14 /11/05, Camp B).

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⁹ The term ‘entheogen’ refers to psychoactive plant or chemical substances when they are used in a sacred context (Ruck et al., 1979). All such substances can be used in a mundane context and the mental state of the user and the context are of fundamental importance (see Smith, 2000: 20).
Tuan (1974) noted how physical setting influenced perception and suggested that the straight lines of conventionally constructed space require different skills of perception than the organic complexity of a natural landscape. Given that research into embodied situated cognition (inter alia, Aydede & Robbins, 2009) has revealed a complex relationship between perception and sense of self, the phenomena Tuan observed may contribute to the wilderness effect.

**Spiritual Dimensions**

All research into the wilderness effect concurs with Greenway that it has a “spiritual” dimension (Greenway, 1995: 128), and Key points out that there are “many examples” of spiritual experiences catalysed by wilderness (Key, 2003: 65). In fact the development of Eco-Paganism amongst UK environmental protesters living in liminal temporary encampments is just the most recent manifestation of the spiritual power of place.

Eco-Pagans seek a sensual relationship with nature and the wilderness effect helps achieve what Letcher described as “an embodied sensitivity to nature” which is essential if we are to “come to know the 'genius loci' the spirit(s) of a place” (Letcher, 2001b). All my research participants linked their sense of connection with nature to their spiritual experiences and for most site Eco-Pagans the organic environment was essential to spirituality. This is apparent in much of what I have already reported, but Rob is typical:

> I find it quite difficult to connect with my spirituality when I'm in an urban environment – It's only when I get out into nature … and feel the energy flowing through me and I have that connection […] the only way to understand it is to be out there and experience it.

Ray had “always been spiritual, about the love for the Earth” but he didn't “particularity have a religion” although he added that “Paganism is the closest that I've seen”. His spirituality had become “deeper” since he first came to live on a protest site partly, he suggested, because he had “lived outside now, near trees” and through meeting “people that are more spiritual” and getting “involved in some of the Pagan ceremonies”. Many Pagans find a name for a spirituality they already have, and Ray had “felt a very strong connection with the Earth” for many years, but had no name for the spiritual dimension of that feeling.

Lauren's experience was more complex, as for most of her life she'd avoided
religion and had “decided there wasn't such a thing as spirituality”. But when she began to visit the Twyford Down protest in the early 1990s, this began to change:

it was the first time I'd ever done chanting and drumming round a fire and I just loved it. Drumming and dancing and chanting round a fire! So fantastic, and spirit days and all that sort of stuff.

Although she later came to understand that these were spiritual feelings, at the time she “didn't want to know what it was, because it was something that I couldn't comprehend”. But her sense of discomfort grew as a “sort of spirituality was waking up” and she became “really scared because I didn't know where to go with it [...] because the only thing I knew was Church of England or Catholics or whatever, and I'd really just dismissed the whole lot of it”.

Lauren's spirituality grew out of a series of profound encounters with the organic environment which began at Twyford Down:

Twyford was such a wonderful piece of land. As you stepped onto it you just thought, 'What's happening to me?' And it was – I suppose it was in a way what first started it all but I couldn't cope with it. [...] the reason I think I had the breakdown was because it presented the real me to me and I just didn't recognise it or was able to cope with it.

Her experiences at Twyford were “just all to much” and she had a breakdown, but her spiritual sensibilities were to return over 10 years later when she arrived at Camp B:

When [Camp B] started it was to me exactly like Twyford Down. [...] I really wanted to go down there, and be part of this, [pause] but I didn't go because, I was scared. I was scared the whole thing would happen again.

Inevitably perhaps, Lauren started to spend time at the new site and one night her spiritual development “really crystallized”:

I was in a bit of a funny state anyway, because I'd had this really chilled out, sitting at [Camp B] [pause] and learning, I don't know, learning about the land again. Learning the power of the land? Something like that? And then, everyone had gone to bed – at least I thought they had – And I went down to the loo – the compost loo, [...] at night sometimes I didn't bother to drop the curtain 'cos I was usually in a hurry [laughs]. And as I sat there, I saw what I thought was a man. And I didn't realise it was anything at the time – I just thought it was somebody peeping at me while I was weeing, and my immediate thought was absolute annoyance and anger that somebody could look at me [...] so when I stood up and then I realised that it wasn't, and it was just as though it was this figure – there was this man. It led out of the afternoons talking, so I
was in that frame of mind and it was just this vision of this Green Man looking at me and it was as though it was just *calling* me, and I just felt [pause] frightened – shaky. [...] This huge figure, and I can only call it the Green Man [...] it had never really happened except that night when I sat at Twyford Down, [pause] I kind of had it. I call that one of my deep spiritual experiences sitting there that night when I knew I'd never be back there, just looking across that land, and I couldn't cope with that being destroyed.

As I was the only other person awake on site Lauren asked me to come and see the “figure in the tree by the toilet”:

We went back there together and she saw the figure as not frightening but protective. She said she believed the Earth is drawing people to protect Herself. Bit like the 'Rainbow Warriors' (her phrase). I laughed as she said in the same breath that she isn't spiritual! (Field notes, 05/07/06, Camp B).

After Lauren and I talked about it the next morning, I noted that:

For her the figure represents a spiritual presence defending [Camp B] and crucially somehow bringing her a message. She was more freaked out that it wasn't a human and that it was a spiritual experience. [...] When she came to see me in the communal [space] she was quite shaken. [...] [But not by the thought of a peeping tom.] It was actually the idea that there was a spiritual dimension. She admitted to me that she was afraid of the whole idea of the spiritual (field notes, 06/07/06, Camp B).

Lauren later told me that it was this experience “that really kicked me off with this whole spirituality Earth bit”, and inspired her to write a poem linking activism with “ancient” wisdom and the power of the Earth.

Two other participants experienced a similar spiritual emergence during the period of my fieldwork, and in each case the wilderness effect was fundamental. Although wilderness researchers have noted individual spiritual experiences, this is the first time a fieldworker has observed the emergence of a complex “nature based” spirituality in participants in any location. I arrived at Camp B within weeks of it being set up, so witnessed all the gradual changes that marked the spiritual growth of Dave, Ray and Lauren, and the latter’s “Green Man” epiphany. Because I was experiencing the spiritual influence of the wilderness effect myself during the same period, I had an embodied understanding of the process. My research demonstrates how spiritual experiences catalysed by the wilderness effect – and related processes – have helped create the sub-culture I call protest site Eco-Paganism. This dramatic example of the power of place helps explain the growth of Eco-
Paganism. Although UK site Eco-Paganism emerged from the 1992 Twyford Down protest (Letcher, 2005: 556), it is found amongst environmental protesters in other countries, notably those spending time in wilderness (Shaw, 2006; Taylor, 2001).

**Exceptions**

Almost all of the key aspects of the wilderness effect were found on protest camps and there are clear explanations for those few that were not. A wilderness trek frequently helps to break an addiction, but as social drinking is common on protest sites I would not expect alcohol addiction to be alleviated. Greenway notes “dramatic” changes in dream patterns during wilderness trips but these were not considered in my research (Greenway, 1995: 128-129).

Not everyone on protest sites shows as much respect for the places they live as the Eco-Pagans, nor does everyone develop a nature based spirituality. Clearly the wilderness effect does not influence everyone and other factors come into play. Although I did not interview activists who lacked a sense of connection, some of these factors were apparent, notably the influence of alcohol at Camps D and E:

> It's great here right now, but Bob tells me it can change in a moment if the 'brew crew' turn up. This is a major factor influencing any wilderness effect (field notes, 21/07/06, Camp D).

On more established camps there is often very little that needs to be done and boredom often leads to alcohol abuse. This was also apparent at Camp E:

> When I arrived I heard [reports] of a lot of drunkenness on site. This [was] confirmed when I went over on Sunday morning to see 6-8 people drinking cider at 10 am. General reports of fighting, drunkenness and noise in the evenings. [...] Then in Sunday [night] things turned round: a fiddle player turned up and it was folk songs and tea round the main fire! Since then I've seen much less booze so things may be turning round (field notes, 05/07/06, Camp E).

Stringer and McAvoy noted four factors that inhibited spiritual experience in wilderness: not enough time alone, not enough time in general to “see, feel and/or experience processes”, “too large a group” and simply “not looking for spiritual

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10 The 'brew crew' refers to mostly itinerant alcoholics who typically drink Carlsberg Special Brew lager which is 9.0% alcohol.
experiences” (Stringer & McAvoy, 1992: 69). All these would be inhibiting factors at protest sites which are often chaotic, sometimes include large groups and attract people with no interest in spirituality. Greenway opines that intention – a factor closely related to this last point – is the key to how powerful the wilderness effect is and observed that many people “carry” urban culture into the wilderness, meaning that they resist entering into it psychologically (Greenway, personal communication).

**Motivation and the wilderness effect**

Environmental campaigners are already committed to activism before they arrive on a protest site and this may have little or nothing to do with the wilderness effect. However, many activists who arrived on site for rational reasons soon become influenced by the power of place. Although all embodied cognition involves emotional engagement (*inter alia*, Damasio, 1994; 2003), Plows suggest that it is especially important for activists:

This is a crucial point in activist narratives as will be evidenced time and again in this chapter, the emotive, personal response – the facts are felt rather than merely understood (Plows, 1998: 173).

Plows notes several aspects of this powerful emotional motivation, all of which tie in with my own research findings and the wilderness effect in general. Plows found that “[s]ome kind of emotional, spiritual and/or aesthetic connection to place ... is often peoples’ first action trigger”. Respect for “nature, for animals, [and] for people” were also key motivating factors and this often “had a spiritual dimension”. Relationships with other activists, “ties formed under (often) extreme conditions” were also important (Plows, 1998: 208), and this correlates with research findings on the close relationship between place and community noted by wilderness researchers (Fredrickson & Anderson, 1999: 38; Greenway, 1995: 129).

Some activists are initially motivated by rational reasons but develop the kind of feeling for the facts that Plows describes. Kate, a Newbury activist quoted in Merrick's (1996: 128) autobiographical account of the protest, is a good example:

I am starting to forget myself why I first went down, but I know it was rationalised by well thought out arguments against the Car Culture. Now these arguments have been replaced by a belief system, an irrational commitment to the land, to the trees and to the people who fight to save them.
Lauren's experience is very similar. Her involvement with environmental activism began when she watched David Bellamy's television series *Turning the Tide* (Bellamy, 1987):

I watched and I thought if only half of what he's saying is true, why the fuck isn't anyone doing anything about it? [...] I just could not believe it and that's when I started getting active with Friends of the Earth, CND – people like that.

Given that Lauren is a retired teacher and “a very logical person” this rational rather than intuitive approach is to be expected. But, as explained above, the influence of protest site life changed her outlook dramatically and after her meeting with the Green Man she concluded that:

what was at Twyford Down is living on – it's turned up at [Camp B]. This feeling, this love of the land, is growing so much in people now. And that is what will win through in the end.

Her rational, logical motivation has been transformed into faith in the power of love for the land. Rob made the same transition, and described the process explicitly:

I tried for a long time, kind of getting up every morning and sort of reminding myself of the ethical issues that were at stake here and you know, trying to each day re-establish my conviction to do something, and I find that trying to do that on a rational level was insufficient to – you know – to fulfilling my aims and giving me that energy. And over the past kind of year – couple of years I guess – I've really discovered how much energy one can invoke from nature, on a very intuitive level, [pause] and that I believe that is far more powerful and far more, um, deeply ingrained within oneself than simply rationalising it, and that’s fundamentally based on experience and based on living essentially, yeah.

For Rob, Kate and Lauren reason becomes replaced by something ultimately far more powerful; an embodied spiritual understanding of connection to place. This experience may be far more common that we realise: Jane, one of Shaw’s informants, was on an anti-uranium blockade near the Kakadu National Park and explained how she “loved to observe the way the protesters from the cities down south would fall slowly into the rhythms of the land and be captivated by them” (Shaw, 2006). It is this embodied knowing of connection that inspires and motivates the “folk” spirituality I’ve described as protest site Eco-Paganism.

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11 Kakadu National Park is situated 250km east of Darwin, in the Northern Territory of Australia.
Paradoxically perhaps, the wilderness effect does not require true wilderness to work its magic. Given that it works very powerfully on UK protest sites, it seems likely that it has the potential to catalyse profound transformation in the wider community. Greenway’s evocative phrase that “civilization is only four days deep” (Greenway, 1995: 129) comes back to me, and I suspect it is even more fragile than that: removing just some of the trappings of the 21st Century can profoundly shift our awareness. My PhD research found that urban Eco-Pagans – who do not live on protest sites – developed a way of relating to the essence of sacred nature which functioned in a similar way to the wilderness effect. Over time, Eco-Paganism enhanced the urban practitioner's embodied awareness: urban Eco-Pagans learnt to become aware of how we think with and through the embodied situated self, and thus enhanced their embodied communion with places, flora, fauna. As well as being profoundly healing, these intimate local relationships patterned a sacred relationship to the world (Harris, 2008).

**Embodied Situated Cognition**

Although western culture privileges rational self-conscious thought, we intuitively know that our understanding is shaped by feelings that lie beyond the realm of “objective knowledge” and conscious cognition. Extensive research concludes that these processes are in some sense embodied. Although as yet there is no fully articulated epistemology of embodied cognition, a consistent interdisciplinary model is emerging, as researchers are apparently discussing the same phenomena from disparate but consistent perspectives. A consensus has emerged that embodied cognition is situated and grounded in practical activity. This process is largely non-verbal and pre-reflective, and depends on an affective, sensual mode of being-in-the-world that reveals a fundamental integration between what we conventionally understand as “self” and “world”. Because of the intimate relationship between “self” and “world”, place can have a profound impact on our thinking and our entire being-in-the-world.

In his survey of the field Peterson notes that for a “significant number of researchers … to understand the mind/brain in isolation from biological and environmental contexts is to understand nothing” (Peterson, 2003: 43). Although

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12 I have reviewed the literature on this subject in detail elsewhere (Harris, 2008), so will simply refer to a few key thinkers here to give a sense of the breadth of the consensus.
the term Embodied Situated Cognition (ESC) emerged from artificial intelligence research it has come to describe an interdisciplinary field enabling advances in psychology, philosophy of mind and social interaction theory (Almeida e Costa & Rocha, 2005). For ESC researchers embodiment means “the body-in-space, the body as it interacts with the physical and social environment” and they conclude that it “is not just that the body shapes the embodied mind, but that the experiences of the body-in-the-world also shape the embodied mind” (Rohrer, 2006: 5).

When Merleau-Ponty articulated the phenomenology of the embodied mind he concluded that in knowing the world we become part of it, and thus the conventional subject-object distinction was illusionary. Abram applies Merleau-Ponty's work to develop an embodied environmental philosophy which understands the body as “a sort of open circuit that completes itself only in things, in others, in the encompassing earth” (Abram, 1996: 62). Thus the immediate environment that meshes with our thinking and perception is participatory in that it always involves “the experience of an active interplay, or coupling, between the perceiving body and that which it perceives” (Abram, 1996: 57).

Gendlin develops Merleau-Ponty's ideas in a somewhat parallel way to show how interaction is more fundamental than perception: our perceptions function as part of our interaction with the world and so become part of how we behave in any given situation. The “body senses the whole situation, and it urges, it implicitly shapes our next action.” (Gendlin, 1992: 345). In everyday language we lack a language to name this body sense, but in the therapeutic practice of Focusing it is called the “felt sense” – an embodied tacit knowing that Gendlin describes as “a body-sense of meaning” (Gendlin, 1981: 10). Although Gendlin describes the felt sense as a “bodily sensed knowledge” (Gendlin, 1981: 25), we need to be clear that his approach requires “a new conception of the living body” as a process by which “the body means or implies” (Gendlin 1997: 19) such that the Gendlian “body” extends beyond the skin.

**The enactive process model**

Enactivism is currently the most fully developed model of ESC and emphasizes that what we conventionally think of as “subject” and “object” are co-arising. Varela and colleagues build on Merleau-Ponty's work to develop a model of cognition as “embodied action”, a process they call "enactive" (Varela et al., 1991: 19).
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xx). By emphasizing action they highlight that cognition is an aspect of the sensory body (Varela et al., 1991: xx) and that “knower and known, mind and world, stand in relation to each other through mutual specification or dependent coorigination” (Varela et al., 1991: 150).

Enactivism is consonant with other key thinkers: both Abram and Bateson (Bateson, 2000: 467) for example, have a fundamentally enactivist approach. Gendlin – a philosopher and psychologist – can be understood as an enactivist, although he does not identify as such. However, on Gendlin’s conception “the body” extends beyond the skin into “a vastly larger system” (Gendlin, 1997: 26) in a way similar to the model offered by enactivism.

By combining enactivism with Gendlin’s philosophy of the implicit, I synthesized a model of embodied situated cognition with more explanatory power than either has alone. Because it draws primarily on enactivism and Gendlin’s process philosophy (Gendlin, 1997), I refer to it as the enactive process model. The model integrates the work of several thinkers I have not introduced above, notably Clark’s discussion of extended cognition (Clark, 1977), Lakoff and Johnson’s embodied metaphor theory (Lakoff & Johnson, 1999) and Gibson’s Ecological Psychology (Gibson, 1979). We are still at an early stage in ESC research, and this is not an attempt to construct a comprehensive theory; I do, however, claim that this model illuminates my fieldwork and offers new insights for ecopsychology.

My “cognitive iceberg” diagram (figure 1) schematically illustrates the enactive process model. It is inevitably an oversimplification and presents the local environment and physical body as more separate than the enactive process model actually suggests.

In summary, the whole “iceberg” triangle represents the body-mind, with the “cognitive unconscious” (Lakoff & Johnson, 1999: 10) in the lower section. The body-mind is engaged in a dynamic relationship with the local environment through extended cognition (inter alia, Chalmers & Clark, 1998; Clark 1977), perception and what Gibson calls “affordances” (Gibson, 1979). Cognitive neuroscience estimates that 95 percent of embodied thought occurs below our consciousness (Thrift, 2000: 36) so most of this processing never reaches everyday

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13 I have explained this model thoroughly elsewhere (Harris, 2008) and can only present a somewhat simplified version here.
awareness, which is at the iceberg's tip.

At the top of the triangle – the tip of the proverbial iceberg – is everyday conscious awareness, which is a very small percentage of who we are. Consciousness is simply what we are aware of, a minimal aspect of a complex system, but because we identify our “self” with consciousness we tend to discount the deeper processes that actually govern much of our behaviour. The level of awareness represented at the iceberg's tip is usually focused quite narrowly and tends to heighten our impression of a subject/object distinction. Such awareness clearly has some survival value, but this “distinction making capacity” can become “hyperactive” and lead to “complete splits between different aspects of reality” (Greenway, 1997: 19).

The dotted area just below the apex designates “gut feelings” or felt senses. Further down the triangle, awareness widens out into what I call the deep body, becoming less focused and blurring the distinction between self and other, shown in the graphic by the gaps appearing in the sides of the triangle. This is the level where the process sometimes called extended or situated cognition operates (inter alia, Aydede & Robbins, 2009).
Embodied Situated Cognition and the wilderness effect

Shaw opines that the sense of connection at the heart of the wilderness effect is “an embodied visceral knowing that transcends the distinction between the inner and outer landscapes” (Shaw, 2006); in other words at the level of embodied knowing/embodied cognition, self and world become integrated and that process is central to understanding the wilderness effect.

Certain circumstances and techniques allow our normally shallow conscious to deepen, enabling us to become more aware of the blurred boundary between self and world. This process can be illustrated using the cognitive iceberg diagram. Most of the time we are unaware of the deeper processes of ESC: as shown in figure 1, our consciousness is focused at the narrow tip of the iceberg. But at other times our normally shallow awareness begins to slide down the cognitive iceberg into the deep body, sometimes bringing a sense of expansion and a blurring of the boundaries between self and world.

This process is apparent in even quite ordinary circumstances: Leder vividly describes on an occasion when he was walking in the woods, caught up with his own concerns:

> a paper that needs completion, a financial problem. My thoughts are running their own private race, unrelated to the landscape. ... The landscape neither penetrates into me, not I into it. We are two bodies (Leder, 1990: 165).

On my model, Leder's awareness is focused at the tip of the cognitive iceberg and he is caught up the familiar dualistic mode of experience our culture considers normal.

But the “rhythm of walking” and the peace of the wood calm his mind and induces an “existential shift”, so that he begins to notice the beauty around him. Gradually

> [t]he boundaries between the inner and the outer thus become porous. ... I feel the sun and hear the song birds both within-me and without-me. ... They are part of a rich body-world chasm that eludes dualistic characterization (Leder, 1990: 165-6).

Leder's awareness has slipped down the cognitive iceberg, broadening out into the deep body and this change in “body-mind-habitus” produces “an altered sense of self” (Jackson, 2006: 328). A fundamental aspect of this change in habitus is the
deepening sense of personal embodiment which results from shifting awareness down the cognitive iceberg. This shift blurs the distinction between self and world, enhancing Leder's sense of connection. The experience Leder describes correlates with the wilderness effect, which as we know is the result of “spending meaningful time communing with nature” (Shaw, 2006).

It is this slide down the cognitive iceberg that – at least partly – explains the power of the wilderness effect. As Greenway and others have noted, the wilderness effect brings “a shift from culturally reinforced, dualism-producing reality processing to a more nondualistic mode” (Greenway 1995: 131). Although "consciousness remains", it is no longer dominated by “the need-crazed egoic process (especially the making of distinctions)”. What remains is “a simpler, 'nonegoic' awareness” which can “open consciousness ... to the more natural flows of information from nature” (Greenway 1995: 132). This is exactly what we see on the enactive process model: when our awareness slides down into the deep body, consciousness remains but we can sense that the “organism and environment enfold into each other and unfold from one another in the fundamental circularity that is life itself” (Varela et al., 1991: 150).

**Conclusion**

This article makes two significant claims: first that the wilderness effect affects activists living on UK protest camps and second that embodied cognition is fundamental to how the wilderness effect works. I demonstrated the first point by reference to my fieldwork and other ethnographic accounts. I illustrated how key aspects of the wilderness effect were expressed; viz. the emergence of a new sense of freedom, feelings of deeper connection, a changed sense of self and spiritual emergence. I then explained how the deeper sense of connection and closely related spiritual experiences enhanced activist motivation.

I then briefly introduced several theoretical approaches to embodied knowing/cognition and set out my enactive process model, graphically illustrated by the cognitive iceberg diagram. The enactive process model model helps explain how spending time in the organic environment can lead to a profound awareness of the fundamental connection between what we conventionally perceive as self and world. This shift in awareness underpins many aspects of the wilderness effect, notably the “shift from culturally reinforced, dualism-producing reality processing
to a more nondualistic mode” (Greenway 1995: 131).

The implications of this research for ecopsychology are two-fold: first, the influence of the wilderness effect is far more widespread than previously thought; second, my enactive process model contributes to the theoretical underpinning for this evolving discipline. Given that the wilderness effect has a powerful and largely beneficial affect, we would do well to encourage its influence; by applying the insights offered in this article we can do just that.

References


Varela, F.J. (1999). “Steps to a science of inter-being: Unfolding the dharma implicit in modern


**Acknowledgements**

This article is based on research that was made possible by a student bursary from the University of Winchester. I would like to thank my supervisors at the University of Winchester for their support and my participants for their co-operation. Thanks are also due to the anonymous reviewers of the first version of this paper, whose comments were invaluable.

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Ecopsychology: A perspective on trauma
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Abstract

Literature has suggested that the cyclical nature of psychological trauma can cause enduring long-term effects on individuals and those around them. This review examines the effects of psychological trauma and its relationship to ecopsychology to provoke questions about integration and stimulate debate pertinent to trauma therapy. While being relatively unexplored with regards to psychological trauma, empirical evidence is beginning to amass to suggest that ecopsychology could be incorporated as a beneficial therapeutic approach. This paper will outline existing approaches to trauma before considering it from an ecopsychological perspective. Some contributions such as wilderness journeys, contemplative practices and the Natural Growth Project, along with their therapeutic and practical implications will be discussed in more depth along with their limitations and empirical challenges. Speculative practical and therapeutic implications are identified and relevant future research is suggested.

Keywords: Ecopsychology; Psychological trauma; Post-traumatic stress disorder; Nature.

Introduction

If we do not consider ourselves connected with nature we are in a state of disconnection and this is what shattered lives are all about. If we cannot make a link with what is outside ourselves, we cannot get to know ourselves (Linden & Grut, 2002: 18).

A traumatic incident is a shocking and emotionally overwhelming situation in which an individual experiences or perceives a threat to the physical and/or psychological integrity of self or others, resulting in a reaction of intense fear, helplessness or horror (American Psychiatric Association [APA], 2000; Lodrick, 2007; Rothschild, 2000). It has long been apparent that such experiences can lead to psychological problems, with possibly the first cataloguing of traumatic
symptoms documented on Sumerian cuneiform tablets following deaths in battle (Ben Ezra, 2001, cited in Grey, 2007). More recently, acts of terrorism such as the attacks in the United States on September 11, 2001 and widespread natural disasters such as the tsunami in Southeast Asia in 2004, have been increasingly formulated from the perspective of trauma by professionals and the media (Courtois & Gold, 2009). Indeed, trauma is increasingly being recognised not as a specialised area, but a fundamental aspect of human experience (Gold, 2008).

Stolorow (2007) took a personal and philosophical reflection on the psychological and emotional impact of trauma, defining it as “an experience of unbearable affect” in a context in which there is an “absence of adequate attunement and responsiveness to the [individual’s] painful emotional reactions” (pp. 9-10). Reactions to traumatic events vary considerably, ranging from the relatively mild, creating minor disruptions in the person’s life, to severe and debilitating. It is common for those who are exposed to trauma to experience intrusive thoughts and images, accompanied by attempts at avoidance, emotional numbing (such as feeling distant or a general loss of interest), and increased arousal (such as sleeping difficulties or anger) (Joseph, 2010).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (APA, 2000) outlines post-traumatic stress disorder (PTSD) as the development of characteristic symptoms of distress or impairment that are present for over one month after exposure to trauma. Banyard (1999) described its cyclical nature, outlining three main clusters of symptoms: re-experiencing phenomena, avoidance/numbing and increased arousal. However, Foa et al. (2008) argued that this diagnostic framework is inherently limiting, and reported a growing clinical and empirically supported consensus for multimodal interventions. Yalom (2002) similarly warned against focusing too much on diagnosis, since it restricts a therapist’s ability to relate to their client as another person and risks assigning people to categories. It has been argued that PTSD is not a neutral term, but a social construction (Maddux et al., 2004) that may inadvertently pathologise normal and natural reactions to trauma (Joseph, 2010).

**Existing Approaches**

The National Institute of Clinical Excellence (NICE) guidelines advocate a course of trauma-focused psychological treatment – cognitive behavioural therapy (CBT)
or eye movement desensitisation and reprocessing (EMDR) – for PTSD with research overwhelmingly appearing to demonstrate their efficacy (e.g., Moss, 2009). However, the present situation is by no means categorical or indeed immobile, and it would seem that there is scope for advancement and innovation highlighted within the literature. For instance, Ryan (2010) highlights advances in the treatment of psychological trauma that have emerged in the light of recent developments in neuroscience, while Tarrier (2010) has called attention to the development of positive psychology which may offer further treatment options.

There has also been a move to challenge existing circumstances within the literature. CBT assumes that the individual’s inability to adequately process the traumatic experience has led to the development of symptoms (Taylor, 2007) which makes little room for inclusion of other modalities and implies that practitioners have knowledge of the client’s internal world (Hemsley, 2010). The availability and standards of CBT have also been questioned: Follette and Ruzek (2006) argued that many CBT clinicians do not have adequate training, while Courtois and Gold (2009) drew attention to a disparity between the need for professionals with expertise in psychological trauma and the availability of these services. It has been contended that just using CBT for PTSD reinforces the medical model of intervention (Hemsley, 2010) without acknowledging that every theoretical model offers a heuristic focus for the level of intervention (Roth & Fonagy, 2005). Hemsley (2010) comments that this undermines professional autonomy within the National Health Service (NHS) and private practice, since insurance companies could demand for interventions to correlate with NICE guidelines (Fairfax, 2008).

Tarrier (2010) argues for continual innovation, which will come from “recognition of variability and heterogeneity and the development of new treatment strategies” (p. 140). Trauma therapy is a complex biological, psychological and social project that unfolds in stages over time and may involve many different modalities to reach a stage of optimal recovery (Herman, 1992). Such rationales invite practitioners to acknowledge the idiosyncrasies of their clients, and with recent developments and emerging alternatives, practitioners are faced with convoluted and perhaps tough decisions to make about which approach corresponds with their therapeutic manner but also best serves the needs of their individual clients.

At this point we turn from what much of the traditional literature has said and look
to the contribution that ecopsychology can offer to the understanding of trauma.

**Ecopsychology**

Roszak (1992) originally coined the term “ecopsychology” as an appeal to environmentalists and psychologists for a dialogue that would enhance both fields. Ecopsychology is indeed a relatively new developing field, though while Roszak (1992) publicly defined it, many of the key concepts originated in earlier work (Roszak, 1979; Shepard 1982). Fisher (2002) has proposed ecopsychology as a foundation for a critical theory of modern society, arguing that it should be a catalyst for social change. He described it as an evolving project, rather than a discipline, identifying the dualism of outer, objective, and inner, subjective reality which has become part of mainstream psychological discourse. Similarly Adams (2005) described ecopsychology as a cultural phenomenon necessitated by our alienation from nature and identified ecopsychology as a means of addressing this crisis, which he typified as “the idolatry of the supposedly separate egoic subject and its insatiable quest for security, certainty, control, and power” (p. 270).

**An ecopsychological perspective on trauma**

Van Deurzen (1997) described our relationship to the earth in a way that seemed pertinent to the premise of ecopsychology: the way we interact with our physical environment should be a central concern, since it underpins the whole of one’s existence, yet ecological awareness is kept on the fringes of society. This itself was considered a trauma by Glendinning (1995) who noted that society has endured a “collective trauma… the systemic and systematic removal of our lives from the natural world” (p. 51). The theme of a repetitive cycle from the psychological trauma literature is evident here, as Adams (2005) described a vicious cycle of our impoverished self and ways of being, which provokes an impoverishment of nature and in turn accelerates a further impoverishment of our self and ways of being. An ecopsychological perspective will now be considered by giving an overview of evidence to suggest therapeutic benefits from natural settings, examining the developmental and evolutionary perspectives that underpin literature concerning ecopsychology and trauma, and finally proposing some possible avenues with an ecopsychological influence that could be considered for their contribution to trauma therapy.
Natural settings have been evidenced within the literature to have psychological, physical and therapeutic benefits. Examples include a study by Pretty et al. (2007), which illustrated that participants in an ecotherapy study reported an improvement in mood merely following a green outdoor walk, and recommended ecotherapy as an affordable treatment for mental distress. Ulrich (1984) discovered physical benefits: that patients following gallbladder surgery recovered faster with fewer painkillers when they had a view of trees through their hospital window than when they looked out on a brick wall. Pertinent specifically to trauma therapy, Lefkowitz et al. (2005) proposed an animal-assisted-therapy (AAT) model for survivors of sexual abuse suffering from post-traumatic stress, anticipating decreased number of therapy sessions.

Aside from approaching the psychological benefits of natural settings, literature concerning ecopsychology also addresses trauma from developmental and evolutionary perspectives, which suggest that nature plays a critical role. Chawla (1998) connected our relationship with nature to a childhood perception that we had of the natural world being alive and conscious, suggesting that it plays a significant role in early development. Shaw (2000) researched childhood nature connections and trauma, observing that nature was characterised as a protector by traumatised children. For some, nature was the only place they could feel safe. For others, it acted as a kind of parent. The significance of this role could reflect Khan’s (1964) conceptualisation of cumulative trauma which states that trauma originates when the primary carer’s protective function is frequently absent or compromised. Shaw (2000) makes a connection between such individuals and later conservation work undertaken, which she attributes as an attempt to resolve their trauma through restitution. Nature in this example appears to be a powerful therapeutic resource, and one that required further exploration. Gatersleben (2008) describes a requirement to reinforce our understanding of the psychological components underlying the relationship between people and their natural environment: a relationship that would appear to develop at a young age. Connections such as this highlight a need for further detailed research to clarify the sphere of nature’s role in our early development, identify its attributes, and explore how this could influence the way we process trauma.

With regard to the therapeutic features of nature, some dominant theories draw upon evolutionary perspectives. For instance, Kaplan and Kaplan’s (1989)
Attention Restoration Theory focused on nature’s restorative capacity in relieving stress. They suggested that natural surroundings promote healing by containing the elements that draw on involuntary attention. Ulrich (1984) proposed a genetic basis for our appreciation of nature in his Stress Recovery Theory (SRT), theorising that emotional and psychological recovery from stress was effectuated when observing natural scenes that precipitated reactions of interest, agreeableness and calm: negative affects were replaced by positive affects, while negative thoughts were obstructed. Wilson et al. (2008) also cited evolutionary perspectives suggesting that humans respond positively to natural environments due to a genetic predisposition which once aided survival (Appleton, 1975; Orians & Heerwagen, 1992). Similarly, Lodrick (2007) illustrated evidence indicating that people instinctively respond in one (or more) of five predictable ways when threatened: ‘Fight, flight and freeze’ are well documented responses (Cannon, 1929; Levine, 1997), plus “friend” and “flop” (Ogden & Minton, 2000; Porges, 1995, 2004). To exemplify this, Levine (1997) noted that “freeze” aids mammals when threatened by a predator: the predator has a reduced possibility of detecting immobile prey, many predatory animals will not eat meat that they consider to be dead, and if the predator kills, the freeze mechanism provides a natural analgesic (Levine, 1997, cited in Lodrick, 2007). Between mammals of the same species the “freeze” response denotes submission, with the conquering animal acknowledging their dominance and abandoning attack on the subordinate animal. Psychological trauma occurs, however, when these strategies continue to be adopted long after the threat has passed (Lodrick, 2007).

Therapeutic implications

If our trauma responses and characteristics are so inextricably linked to the natural world, then surely it could be a relevant inclusion into both the conceptualisation of trauma and the therapeutic work. A variety of interventions outlined by Buzzell and Chalquist (2009) exist under the ecopsychology umbrella such as restoration work, animal assisted therapy (AAT) and horticultural therapy that could be considered as approaches to psychological trauma. This review will present wilderness journeys, contemplative practices and the Natural Growth Project, along with their therapeutic and practical implications.
Wilderness Journeys

Wilderness journeys are typically group retreats with personal growth or therapeutic purposes (Fries et al., 1998). Used initially in psychotherapy under the name “psychoecology” (Greenway, 1999), they are described as a powerful countermeasure to depression, anxiety, and emptiness associated with life in modern society, with participants overwhelmingly reporting stress reduction, mental clarity, and inner calm (Hendee & Martin 1994).

Exploring the ways that wilderness journeys could contribute to trauma therapy requires a closer look at the observed benefits of these experiences reported within the literature. Driver et al. (1987) created an index of measurable benefits of wilderness journeys including greater self-sufficiency (e.g., Brody et al., 1988; Klint 1990; Paxton & McAvoy, 2000) and self-actualisation (Maslow, 1970); suggesting wilderness as a means of recovery from trauma guided by intuition, instigated by and led by the client. Skill development and challenges successfully met are reportedly perceived as empowering and proof of capability and self-worth (Johnson 2002). Indeed, Putman et al. (2009) reported in a survey conducted with Guatemalan aid workers that levels of personal accomplishment were inversely related to PTSD symptoms, suggesting that the sense of accomplishment achieved from a wilderness experience could have a positive impact on a traumatised individual. Driver et al. (1987) went on to report that being in the wilderness is a physically-demanding experience, including associated health benefits set against the detrimental effects of trauma (ISTSS, 2004). A clinical resource written to facilitate primary health care providers working with survivors of war trauma and torture advised that such clients could benefit from physical challenges (Johnson, 2005), though this would have implications for a thorough assessment to ensure that a client’s limits and perceptions of the wilderness are accounted for (Tedeschi & Calhoun, 1994). Johnson (2002) additionally wrote that wilderness facilitates therapeutic healing as it has limited factors that require an outward focus, thereby directing the participant’s attention towards self-reflection.

These findings take embryonic steps to identify some of the ways in which nature can play a therapeutic role in the recovery from trauma, but they are by no means conclusive and demand further exploration to determine a comprehensive set of factors that therapeutically benefit a client. Research concerning the effects of wilderness therapeutically for trauma is additionally scarce and inconsistent.
Russell et al. (2000) reviewed wilderness therapy and reported positive outcomes, yet the treatment focused on adolescents not exclusive to trauma, making it difficult to generalise. Further work in this area could establish perhaps how a wilderness journey could be orchestrated with the specific purpose of trauma therapy, or indeed which aspects of wilderness journeys could be harnessed and used in other therapeutic approaches for trauma.

**The Natural Growth Project**

Linden and Grut (2002) described the Natural Growth Project which offers traumatised clients a programme of long-term rehabilitation through a combination of horticultural work and psychotherapy. This is not an isolated initiative: horticultural therapy has previously proved effective for addressing the trauma of refugee displacement and resettlement (Tristan & Nguyen-Hong-Nhiem, 1989). Within the Natural Growth Project, the role played by nature is clearly characterised by the authors as a critical one. Nature is used as a medium for communication and as a source of healing, based on the premise that a person who has suffered a trauma can find relief by restoring a sense of autonomy and self-responsibility through making a connection with a natural environment. The role of nature is described not only being a place of peace but a space in which clients can process the trauma: “…using nature as a metaphor, it is possible very quickly to access deeply traumatic events and to work on the most difficult feelings, and the life cycle embodied in nature carries the promise of healing” (Linden & Grut, 2002: 12).

It would seem in this instance that nature can be especially containing for the Natural Growth Project’s clients. The authors described that for some clients, being outdoors is often where they have felt safe throughout their lives. For others, the outdoors is merely more containing than the closed consulting room for sharing traumatic experiences. Nature is described as a significant focus for traumatised clients: identification with the natural cycle plays out themes of birth, growth, decay and death, providing powerful metaphors to be worked through therapeutically. In this way, a re-connection with the natural cycle appears to be a powerful therapeutic tool, especially so since it demonstrates the capacity to communicate within any language.

While NICE guidelines (2005) state that interpreters and bicultural therapists
should be used to ensure that people with PTSD from diverse cultural and ethnic backgrounds are provided with the opportunity to utilise psychological interventions, there are drawbacks and a vast associated cost. While the BBC (2006) estimated that £55 million was spent every year on translation services by the NHS, Jones (2007) argued that this was likely to be a conservative estimate, and argued that on many occasions a full exploration of a patient’s problem had not been possible because of lack of availability of a translator. It has also been argued that the medicalised approach for PTSD recommended by NICE guidelines fails to acknowledge cultural, religious and socio-economic factors (McHugh & Triesman, 2007), and despite an escalating acknowledgement that PTSD is a universal response to trauma, research overwhelmingly originates in Western nations (Foà et al., 2008). These limitations are precisely how the Natural Growth Project illustrates a unique benefit of ecopsychology. Linden and Grut (2002) observed that since the clients came from a number of countries with diverse cultural, religious and linguistic backgrounds, their difficulty expressing themselves in words was felt to be impeding any psychotherapeutic work in a typical setting. The use of outdoor resources provided an affordable and effective means of overcoming these obstacles. Traumatic incidents can be difficult to articulate, yet the authors considered how nature could supply a means of communication for clients to express memories of painful experiences and their impact. The cross-cultural relevance of ecopsychology is clear: “acknowledgement that they are inhabitants of a shared earth, rather than inhabitants of a fractured nation, or state, can create an important new healing perspective” (Linden & Grut, 2002: 21). Such observations suggest that the natural world transcends national, ethnic, religious and racial boundaries, affording ecopsychology the opportunity to affiliate with a wider population than some of the alternatives, including those who may not have had access to traditional therapy.

Working in this way is different and unconventional and therefore raises issues that would need to be particularly managed. Linden and Grut (2002) indicate a number of practical considerations, including the establishment of boundaries. Since there is no ascribed therapeutic space or fixed time, the boundaries are less apparent, perhaps requiring a more mature or experienced practitioner to manage them appropriately. Furthermore, practical issues such as confidentiality and client feedback would need to be managed outside the confines of the therapy room.
Contemplative Practices

Adams (2005) advocated awareness practices as a powerful means of building non-dual relationships or affinities with nature. One contemplative practice that has been much-discussed in relation to well-being is mindfulness meditation, which has its roots in Buddhist and other contemplative traditions where conscious attention and awareness are actively cultivated (Brown & Ryan, 2003). Mindfulness involves the use of focused attention upon personal experiences to promote calmness and stability (Kabat-Zinn, 1990) and is thought to help achieve self-acceptance (Chodron, 2001). It typically focuses on several domains, including interactions between behaviour and the universe (Harvey, 1990), and Follette et al. (2006) have argued for the inclusion of mindfulness practices for those who have experienced a traumatic event. Mindfulness is sometimes practised in a natural setting in the form of retreats; for instance, Jon Kabat-Zinn has been running such retreats in the mountains since 1998 in association with the Stress Reduction Clinic at the University of Massachusetts Medical School (UMMS, 2009). The premise appears to be that spending time consciously in nature is nourishing on a physical, emotional and spiritual level (Miller, 2009) and that being in a natural setting facilitates mindfulness practices. Trauma numbs the senses, since our energy is all directed towards the threat response, but an experience of practising mindfulness in a natural setting made me aware how much nature reinvigorates them. Some participants described how the experience made them feel able to confront fears, that being in a forest brought with it a sense of containment, permanence and regeneration for them. Just as trauma is a repetitive cycle, one can gain a sense of a greater cycle here and a feeling of inclusion and connection in some indefinable way that could potentially make desensitisation, pushing oneself to the edge, or even re-living a traumatic event more bearable.

Several branches of research also indicate a potential link between trauma and mindfulness-related processes: Pennebacker and O’Heeron (1984) discovered that the individual’s attempt to suppress memories of trauma can increase the occurrence of intrusive thoughts (Clark et al., 1991; Wegner et al., 1990) and intensify the negative emotional experience (Cioffi & Holloway, 1993; Wegner & Zanakos, 1994). Mindfulness interventions have since been integrated into behavioural treatments for trauma with promising preliminary results (Becker & Zayfert, 2000; Simpson et al., 1998). If the impact of a natural setting facilitates
mindfulness, though difficult to describe or define how, then it suggests room for investigation. Further studies could, for example, explore the comparison of mindfulness practised in a bare room compared to the outdoors and investigate how this could also be incorporated into existing interventions.

Practical Implications

If we are so inextricably linked with the natural world, then it would suggest that a therapist’s conceptualisation of clients requires expansion beyond the problematic, modernist notion of a self-contained individual (Manafi, 2010; Strawbridge, 1996). A commitment to good practice, as outlined by the British Psychological Society (BPS, 2005) and the British Association for Counselling and Psychotherapy (BACP, 2010), is to keep up-to-date with the latest knowledge, implying that practitioners have a continual ethical responsibility to explore how alternative approaches could be used to benefit clients. The pertinent considerations therefore concern whatever adjustments psychologists and other therapists could make in order to look beyond the presenting problem and incorporate appropriate ecopsychological concepts into trauma therapy, wherever they could be relevant and useful to a client.

One suggested adjustment is that the assessment could be broadened to incorporate questions about a client’s environment, the impact that this has on them and their perceived relationship with the natural world (Burns, 1998; Milton, 2009). Laszloffy (2009) for instance proposed questions that explore potential associations between typical presenting problems and broader ecological planetary dynamics, allowing the therapist to consider how a client’s presentation of trauma might be linked to expansive issues like consumerism, a disconnection from nature, and environmental degradation. Laszloffy also advised trainees to expand their frameworks by considering their own relationship with the natural world; identifying didactic and experiential methods which could be used. Variety appears to be significant, as the curative powers of nature are enhanced by the degree of mindfulness and mental focus one brings to these interactions (Louv, 2005). On a practical level, van Deurzen (1997) observed that clients can be influenced strongly just by the consulting room, suggesting that simple consideration around the therapeutic space created to provide an environment for consultation could be used to great effect.
Therapeutically, the natural world could bring another dimension into the transferential relationship, with practitioners now considering how aspects of the natural world impinge on our consciousness. Further exploration would be required to develop this, for example drawing on the work of various attachment, personality and object relations theorists (Bowlby, 1969; Erikson, 1950, Sullivan, 1940). Work could also be progressed to explore ecopsychology from a cognitive framework. Since many of our assumptions developed in early childhood result in the construction of beliefs about the self and world consistent with these experiences (Janoff-Bulman, 1989), it is suggested that therapeutic work in the natural world could repair some of the cognitive damage to a trauma survivor's perception after their world-view has been fragmented.

Adams (2005) commented on our requirement for rushed target-based delivery, reminiscent of the current system of managed health care and evidence-based practice, in which the requirement is to cure rather than understand (Milton, 2009). This alludes more to an appeal to change pace, in line with the client as opposed to the treatment, to see the environment in which they function outside of their presenting problem and slow life down to a healing, natural pace – for to define is to limit, just as to manualise is to generalise. A need to quickly resolve a client’s issues can serve as a distraction from the root of an individual’s treatment needs, not to mention the significant associated cost. Mind (2007) estimated that in 2005, 27.7 million antidepressant prescriptions were written in England, costing the NHS £338 million and despite NICE guidelines advocating otherwise, Hairon (2006) revealed that 93 per cent of general practitioners prescribed antidepressants due to lack of treatment options, even if they did not see this as an effective approach (Halliwell, 2005). Medications used to treat PTSD include a range antidepressants, adrenergic agents, and atypical antipsychotics (Friedman et al., 2009). While these may be the most relevant treatment in certain instances, such statistics should surely be continually challenged and considered against alternatives.

The NHS era of austerity was indicated by the Department of Health in March 2010 as it illustrated how it will actualize £4.35 billion of savings annually by 2012-13 (Laurence, 2010). Budget constraints are seemingly unavoidable, but the inclusion of ecopsychology could potentially provide a cost-effective and natural addition to existing approaches. Perhaps future research could analyse the costs and benefits associated with abandoning a short term schedule. Ecopsychology
may well prove to be more cost-effective than existing options, and in the longer term, it may even be a prophylactic measure.

**Empirical considerations**

Empirically, ecopsychology is still an emerging field, despite the World Health Organization’s (WHO, 1946, 1986) emphasis that a holistic approach to health is defined as a state of complete physical, mental and social wellbeing. It appears to be difficult to define the effects of a natural environment on an individual, with all its interactions and distinctions. However, while this is a counter argument to ecopsychological research, Linden and Grut (2002) maintain that this could also be its biggest support, for nature simply enables people to “express the inexpressible” (p. 16). A simple natural metaphor can sometimes depict to an individual what words are unable to convey, irrespective of a person’s language, background or beliefs. This could perhaps be the one common framework that we all share.

Despite methodological difficulties, qualitative and quantitative empirical evidence is beginning to amass. Doherty (2009) noted that ecopsychology has advanced through substantial clarification and theoretical and practical development, while Winter and Koger (2004) indicated how ecopsychology can be empirically validated and used in a conventional psychology framework (e.g., Johnson & Johnson-Pynn, 2008; Vakoch, 2008). Wilson et al. (2008) acknowledged the emergence of quantitative studies evidencing positive findings to suggest that the application of nature can improve and conserve mental health, with advanced national and international policy considerations and directives (Diette et al., 2003; Grahn & Stigsdotter, 2003; Guite et al., 2006; Hansmann et al., 2007; WHO, 1997). They additionally discussed studies in which symptoms associated with trauma such as self-esteem and depression (ISTSS, 2003), are significantly observed to improve (e.g., MIND, 2007; Pretty et al., 2005; Reynolds, 2002).

While empirical evidence is indeed starting to accumulate (e.g., Sempik et al. 2010), Gatersleben (2008) advocated future research concerning nature’s role in the health and well-being of individuals suffering from longer-term psychological problems to definitively clarify the processes which may underlie environmental preferences and the restorative effects of nature. Of course, empiricism can only elaborate and expand understanding within the confines of quantitative research and all of its associated limitations. McCallum and Milton (2008) have proposed
acceptance for both empirical and representational approaches so that the meaning of natural phenomena is not lost.

**Conclusions: Integration and future research**

This review has examined the potential use of ecopsychology in psychological trauma. Literature has demonstrated that the cyclical nature of trauma can lead to prolonged psychological problems, while the evolving approach of ecopsychology appears to have substantial therapeutic benefits, and openings for creative integration. More detailed research could provide valid and useful information about the efficacy of this in effecting recovery from psychological trauma, assisting in generating a conceptual framework that will guide future empirical studies, increasing practitioner awareness and providing more distinct means of integrating ecopsychology.

This review is not about endorsing a new prescriptive methodology, but an integration and incorporation of a range of methods so that therapeutic practices continue to evolve to ultimately match the most appropriate approach to the client. CBT is conclusively recommended within the NICE guidelines, with a concentration on symptoms and diagnostic criteria (Hemsley, 2010), yet this fails to adequately provide a richer understanding of responses to trauma (McHugh & Treisman, 2007). People can only heal from trauma if supported as whole beings and provided a safe channel to explore their world and reconnect with themselves (Herman, 1997; Paulson & Krippner, 2007) and the therapist’s ability to engage the client with the therapeutic work is surely an essential component. Even with medication, dosage and timing has to be adapted to the patient. The responsibility of therapists therefore lies in ensuring that the most appropriate approach is adopted for the client as an individual, rather than coercing them into conforming to a specific therapeutic model.

While empirical evidence is beginning to amass for ecopsychology, further projects could be monitored and evaluated to reinforce existing findings and expand data. This should fit the model of evidence based practice as outlined by Roth and Fonagy (2005) which has “innovative practice” and “reflection on small scale case studies” embedded in it as well as research into them and the dissemination of conclusions in practice manuals. Chalquist (2009) suggested that unrestrained empiricism is itself a version of trauma, an intellectualised resistance
from experiencing the world on its own terms. Perhaps indeed scientific methods are inadequate to comprehend the unique relationship we have with the natural world, or maybe we are just inter-connected in ways beyond our understanding. Therefore, more is needed: namely, a willingness to experiment and explore other approaches, to identify ways in which these approaches may be integrated, and to constantly question and debate the accepted methods as a reflective and critical practitioner.

References


Herman, J.L. (1992) *Trauma and recovery.* New York: Basic Books


Linden, S. & Grut, J. (2002). The healing fields; Working with psychotherapy and nature to rebuild shattered lives. Published in Association with the Medical Foundation for the Care of Victims of Torture. London: Frances Lincoln.


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The Ouroboros (Part 1):
Towards an ontology of connectedness in ecopsychology research
Margaret Kerr & David Key

The Ouroboros has been said to have a meaning of infinity or wholeness... [it] is a dramatic symbol for the integration and assimilation of the opposite (Jung, 1955-6: 513).

Abstract

In this paper we explore a new ontological foundation for ecopsychology research. Central to ecopsychology is the idea of the ecological self – the human self as a deeply interconnected part of wider nature (Naess, 1986/1995). The positivist methods which dominate the biomedical and natural sciences have no way of studying this interconnected self. Despite this, there is a risk that fears about mainstream scientific credibility may lead ecopsychology researchers to embrace a positivist approach. In the rush to gain apparent scientific acceptance, the heart of ecopsychology could be lost. We argue here that a radically contextual ontology is needed to protect the heart of ecopsychology. From this foundation, in our second paper, “The Ouroboros (Part 2)”,¹ we go on to develop an alternative – transpersonal – methodology for ecopsychology research.

Keywords: Ecopsychology, gestalt ontology, heuristic research, intersubjectivity, unconscious.

Positivism and ecopsychology

One of the stimuli for writing this two-part paper was a conversation with a medical school professor. Although the professor was personally interested in ecopsychology, he apologised that his institution would be dismissive of the subject due to its lack of an “evidence-base”. He explained that research on the link

¹ See this issue, pp. 61-75
between environment and human health was already being undertaken at his school – in a laboratory designed to measure the physiological effects of factors isolated from natural environments. The factors to be tested included the sound of running water and different shades of green. It was obvious from his example that by “evidence-base”, he meant a certain kind of quantitative evidence, which is familiar to biomedical scientists.

We felt worried by this clinical dissection of nature because, as ecopsychologists, we have found that working with nature as a whole system (including humans) provides a better understanding of human ecological health. Research methods that isolate one “part” and cut away its relationships with the rest of the system can be self-defeating and produce findings that are seriously restricted.

Much of the research that currently attracts funding in psychology and health is based on a paradigm like that described above; where physical phenomena are studied objectively, in isolation, in a search for causal laws and definitive truth. This paradigm is known as “positivism”. It has its origins in the early 19th century and is the dominant philosophy behind mainstream scientific research today. The core tenets of positivism are shown in Appendix 1.

Unfortunately, positivism often hides the processes that separate humans from the rest of nature. In the worst case scenario, it even disconnects phenomena from their whole context and forces them to be seen as artificially separate parts, as in our example of the medical school research. In this way, positivist methodologies mirror many of the disconnecting patterns of industrial culture, which ecopsychology aims to challenge. Vital information, that could help to develop a sustainable culture based on interconnectedness, is dismissed as invalid or simply missed altogether. To do justice to the full nature of ecopsychological phenomena we need a new methodology that allows interconnections to be clearly seen.

It would be easy for ecopsychology to resign itself to the belief that positivism was the only way to gain acceptance by the mainstream academic community. However, this strategy would keep us trapped in a culture of disconnection. We need to be bold enough to break free. But as ecopsychologists we must also keep our relationships with the academic research community, as this is where our political power lies. To achieve this balance we need to enter into a dialogue where we can explain logically why positivism limits ecopsychology – and explicitly offer an alternative approach.
In this paper we explore the historical and ontological ground for a new approach to ecopsychology research. In a second paper “The Ouroboros (Part 2)”, we describe our development of this as a methodology which preserves academic rigour, deepens our understanding and aids political influence.

**William James and “radical empiricism”**

The positivist paradigm has not always been as dominant in psychology as it is today. William James, one of the founders of psychological research, held an epistemological position of “radical empiricism”, which sees all the contents of human experience as valid objects of study. This validity applies not only to ‘internal’ mental phenomena and “external” physical phenomena, but also to their interconnections, and the rich web of meanings woven between them:

> the relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as 'real' as anything else in the system (James, 1904: 533).

What’s more, James proposed that human consciousness is an inextricable part of this web. He writes:

> there belongs to mind, from its birth upward, a spontaneity, a vote. It is in the game, not a mere looker-on; and its judgement of the should-be, its ideals cannot be peeled off from the body of the cogitandum as if they were excrescences... (James, 1878: 21).

James then, was years ahead of his time in seeing that a contextual and participatory ontology is needed to explore complex and situated psychological phenomena.

One of James’s central areas of interest was parapsychology. Along with colleagues in the Society for Psychical Research, he applied radical empiricism to the investigation of paranormal phenomena. In the latter half of the nineteenth century, he generated a large body of empirical data (Blum, 2007). With the rise of psychoanalysis and behaviourism in the early twentieth century, academic interest in the paranormal became less fashionable. However, more recently parapsychology has re-emerged and has been subject to the rigorous application of positivist methods, in an attempt to reinstate it as a credible part of academic psychology. We would suggest that this recent development has inadvertently
offered evidence of what can happen when positivist methods are applied inappropriately to the human psyche. There are important lessons to be learned from this, which we can apply to ecopsychology research.

The psi paradox

Surveys have shown that paranormal experience, or “psi”, is widely reported among the general population. For example, in a study in 1987, 67% of American adults reported having had psychic experiences (Radin, 1997). Despite this, such experiences are usually considered as being peripheral to the study of psychology: they are often referred to pejoratively, as “anomalous”. As already described, contemporary researchers have attempted to gain mainstream credibility by using positivist methods to study psi. For example, significant research on psi has emerged from departments of engineering, where sensitive equipment has been developed to “measure” it: the focus here is on wrestling the paranormal directly into a quantitative framework.

Some psychological phenomena, for example in cognitive psychology, are relatively easy to isolate and are therefore well-suited to positivist methods. However, a closer look suggests that studying psi in isolation from the interconnections that weave it into a complex context may degrade it. For example, Dunne and Jahn (2003) present an intriguing description of how the performance of “remote viewers” deteriorated as the researchers’ methods became increasingly positivist – as they shifted from collecting stream of consciousness reports to binary, yes/no answers in questionnaires.

They suggest that:

> each increment of analytical refinement appears to have resulted in a systematic reduction not of the 'noise' but of the 'signal' itself. This raises the somewhat radical possibility that manifestation of the anomaly may actually require a certain degree of the very noise, or uncertainty, that we had invested so much effort to reduce (p. 232 – emphasis ours).

So, the methods of positivism may be dismantling their object of study. As Tolstoy (1882) writes:

\[\text{Remote viewers}^{2}\text{ are people who “see” mental images of geographical areas which they are not personally familiar with. These areas are presented as “targets” by researchers. Outside the laboratory, such information is often elicited because of its strategic value, for example in police or military operations.}\]
If it were not so frightening it would be amusing to observe the pride and complacency with which we, like children, take apart the watch, pull out the spring and make a toy of it, and are then surprised when the watch stops working (p. 60).

Dunne and Jahn’s analysis suggests that psi is deeply woven into the unconscious psyche. Other narrative reports suggest that it is also part of the intricate web of our relationships with each other. For example, published accounts of near death experiences (e.g., Cook et al., 1998), apparitions of loved ones in distress (e.g., Blum, 2007; Haraldsson, 1987), precognition between humans and animals (e.g., Sheldrake & Smart, 2000), and apparitions in the context of extreme human suffering (Haraldsson, 2009) suggest that these spontaneous manifestations of psi happen in a profoundly relational context. What deeply touches the living, the dead and the dying in these examples, may provide the necessary emotional charge for such phenomena to “break through” into the conscious world.

Positivism studies phenomena by breaking them up into parts, and sees the whole as equal to the sum of its parts; it also studies these parts in isolation from the whole. However, it would seem that a completely different ontological basis is needed for parapsychology research: one that is deeply contextual and does justice to physical and metaphysical interconnectedness. In the next section, we argue that a similar ontological basis should also inform ecopsychology research.

**Radical interconnectedness and the ecological self**

We suggest that the human psyche is woven into nature in the same way that psi is interwoven into a larger emotional and physical context. As the Jungian analyst and researcher, Robert Romanyshyn (2007) writes,

> At the deepest level of the unconscious, the unconscious is nature. The consequence, of course, is that as the psychologist probes deeper and deeper into the psyche, he or she descends into the soul of the world. He or she discovers that at the psychoid level of the archetypes, psyche matters as a matter of the soul of the world. He or she discovers that the unconscious is not just in us, but that we are in the unconscious of nature, and that at the deepest level of our psyches, we retain some dim remembrance of once, very long ago, having been a part of the world's dark-light (pp. 38-39).

Reflecting on the literature (for example see: Abram, 1997, 2010; Bernstein, 2005; Buzzell & Chalquist, 2010; Daniels, 2005; Jung, 1963; Plotkin, 2008; Roszak et al., 1995), our own experiences, and on those of clients and colleagues over the
years, many of the deepest and most subtle experiences of psyche and nature make more sense if a wider interconnected self – rather than the everyday skin-bound sense of “me” – is used as the datum (Kerr & Key, 2012). This has been referred to by Næss (1986) as the “ecological self”: a shifting, complex self that is integrated with the rest of nature, both physically and metaphysically; both psychologically and ecologically. To study the ecological self, perhaps we need to return to James’s radical empiricism and allow that physical and mental phenomena and their interconnections are worthy of research. But we would contend that we need to go further still, beyond the dualism that sees objects of study as discrete entities, and instead see ecopsychological phenomena as inseparable parts of a gestalt.

A gestalt is a structure where the whole is greater than the sum of its parts. From this, Næss (1989) developed the concept of “gestalt ontology” – where not only is the whole greater than the sum of its parts, but also each part is greater as a result of the whole. From this, we can deduce that phenomena may only become fully visible when studied as part of the gestalt to which they belong (Kerr & Key, 2012). If we study things in isolation, we will miss seeing their full nature.

To make ecopsychological phenomena fully visible, we need a new interconnected way of “seeing”. A clue to this comes from taking the metaphor of seeing, at first, literally. In the mid 20th Century, following from James’s radical empiricism, William Gibson developed “Ecological Psychology”, which he applied particularly to visual perception. Gibson holds that perception is direct – part of an ever-changing experiential gestalt with which we are always interacting. Perception cannot be separated from meaning and possibilities for action. So, for example, in Gibson’s view it is not possible to “just see” a handle – we see a “handle for turning”. As human beings, our perception and our ways of being, understanding and acting in the world are inseparable (Roth, 1990). This perspective is also explored by contemporary writers for example, Abram (2010), Sewall (2000) and Capra (1997). Making the link back to the prime motive of ecopsychology, Capra even referred to the ecological crisis as “a crisis of perception”, made up of diverse issues that “cannot be understood in isolation” (p. 3).

There are resonances in these contemporary perspectives with indigenous “ways of seeing”, for example the Sami of northern Europe,

possess the kind of knowledge that Western culture does not fully acknowledge as valid knowledge. A person is able to comprehend things in their totality, in a “flash.” But what that
flash is, where it comes from and what its content is, are difficult to explain succinctly on the basis of the Western system of knowledge. Sami knowledge is immediate in the sense that living as they do within the cyclical, nomadic circle of life, the Sami occasionally land in situations where they can free their thoughts and open themselves up to reality without observing it consciously. A person can become part of reality without having to construct it first. The direct knowledge gained through shamanistic methods and experiences and through a long-lasting stay in nature makes people conscious of the interrelatedness of animals, stones, and other natural objects and beings. Ecological thinking becomes an important factor in the maintenance of those mutual relationships (Kailo, 1998: 15).

Similarly, in North America,

unity among people, nature, and spirits can be found in Navajo tradition relating to the concept of Diyin. The concept itself relates to a kind of 'sacred wholeness' that is believed to be fundamental to human life. According to Navajo professors Nancy Maryboy and David Begay (2004), Diyin is a dynamic and ongoing process encompassing all things existent in the universe through a pattern of complex interrelationships, and this process constantly changes as the living and natural elements which make it up change Diyin (Williams, 1997: 140).

It is obvious from these indigenous perspectives, and from Naess’s formulations of gestalt ontology and the ecological self, that these ideas of “self” do not fit with the positivist worldview. The ecological self is interconnected – part of a constantly changing gestalt; positivist psychology assumes a discrete self, who has experiences which “happen to” him or her, or who “makes things happen”. Positivism assumes a subject or object of experience, a cause and effect self. The ecological self is an acausal self.

Further, positivism assumes a self that is situated more-or-less consistently in time and space. This establishes a point of perspective from which phenomena are studied. Gestalt ontology, on the other hand, sees the self as a form emerging from a constantly changing formless whole – like a wave emerging in the rapids of a river. In the same way that the wave cannot be removed from the rapids without being changed beyond recognition – or more likely completely destroyed – the self cannot be meaningfully removed from its whole ontological gestalt.

**Psyche and matter**

There is a deeper question here, about how we might be integrated with the rest of nature: where does psyche stop and matter start, and do they interpenetrate each other at the deepest levels? The positivist approach assumes that matter is matter
and psyche is psyche, but what if the distinction is not that clear cut? Gregory Bateson (1972) asks,

But what about ‘me’? Suppose I am a blind man, and I use a stick. I go tap, tap, tap. Where do I start? Is my mental system bounded at the handle of the stick? Is it bounded by my skin? Does it start halfway up the stick? Does it start at the tip of the stick? (p. 459)

Parapsychology acknowledges this self-boundary question in its subjects of study, which include “mind-matter interactions” such as poltergeist phenomena (e.g., Roll, 2003), and healing by laying-on of hands (e.g., Bengston & Krinsley, 2000). The parapsychology researcher, Jahn (2001: 451) has proposed a model of how such “mind-matter interactions” might be conceptualised. In this model, there are four quadrants:

Key:

- C = Conscious mind.
- U = Unconscious mind.
- I = Intangible events or processes of the physical world.
- T = Tangible events and processes of the physical world.

Figure 1. Jahn’s model of mind-matter interactions (after Jahn, 2001)

In Jahn's model (Fig. 1), “paranormal” processes are shown by the U-shaped arrow, traversing all four quadrants. “Normal” processes are shown by the straight arrow. Positivism uses the conscious mind (C) to study what emerges into tangible form (T). In doing this it stays above the x-axis and uses quadrant C to study quadrant T exclusively. As such, it will at best give a partial account of psychological phenomena, which omits unconscious and intangible elements. At worst, by creating conditions which block events occurring below the x-axis, the positivist methodology may stem the flow of some phenomena altogether – as suggested by Dunne and Jahn (2003) in their analysis of “remote viewing” studies. Positivism studies the lines, and misses what might exist between them. It imposes
control and an illusion of completeness, at the expense of ecological validity. What is needed is a methodology that makes it possible to dive below the x-axis, and open out into the space between the lines. It is also important that, on surfacing from this territory, the insights gained can somehow be remembered well enough and translated into terms intelligible to the conscious mind (Tart, 1998). This is no easy task, and may require immediate, intersubjective, creative and non-verbal methods of expression.

Perhaps at the deepest level of exploration, the axis on Jahn’s diagram between the unconscious mind and intangible processes – between psyche and nature – is erased, as Romanyszyn (2007) suggests. Certainly, there is much evidence in descriptions of mystical ways of seeing that ultimately all these axes can be erased. Such descriptions are common in all cultures, and throughout human history (for example see, Brody, 2002; Campbell, 1968; Eliade, 1964; Jung, 1963; Tacey 2009/1995). This opens the possibility of a methodology that allows the full range of phenomena to interweave in a cohesive narrative on Being.

On first appearance, it might seem that Wilber’s “Integral Theory” four quadrant model provides a way for this kind of integration to take place (Wilber, 2001). However, we would suggest that Wilber’s model risks falling prey to the same atomistic tendency as positivism – dividing one aspect of the universe from the other, and more specifically, dividing matter from psyche – obscuring the “dark-light” of nature. As McFarlane (2001) says, in his critique of Wilber’s four quadrant model:

Wilber himself writes, ‘Although consciousness and value and meaning are intrinsic to the depth of the Kosmos, they cannot be found in the cosmos. That is, they inhere in the Left Hand dimensions of the Kosmos, not in the Right Hand surfaces’ (A Brief History of Everything, p. 245). This assertion is based on the assumption... that the mind and soul cannot take exteriors as their objects, that exteriors can only be known through bodily sensations alone. Of course, if we artificially restrict our knowledge of being to perception alone, we will only see the perceptual surfaces of objects. We are then blind to seeing any depth in the cosmos and we reduce the meaning of ‘exterior’ to the physical alone, as Wilber has done (emphasis ours).

Wilber’s model is holistic, and allows for interrelationship of elements within categories, but it abstracts psyche from matter, and does not allow for the possibility of a numinous opening-out of experience as part of a gestalt. It thus denies the possibility of deeper holism and interrelatedness by assuming its
perspective is already complete.

Reports of psi phenomena seem to suggest a kind of holism where psyche is immanent in matter, a perspective reflected in parapsychologist, William Roll’s (1997) invocation of the Languna Pueblo concept of the “longbody”:

What seems inanimate to the body’s soul may be part of the longbody, notably the people and things within the person’s circle of psychic interaction, such as family and friends, land and possessions. These are permeated with meaning and memory; they are as mental as they are material. The dualistic view is the view from the small body. Matter feels different from mind to the small body, heavy, recalcitrant, immune to command, and so we place it in another part of nature (p. 64).

In Roll’s terms, and in conclusion, ecopsychology needs a research methodology that honours the “longbody”, and does not objectify it, or attempt to dissect it. Transpersonal methods such as those described by Braud and Anderson (1998), Romanyszyn (2007) and Moustakas’s heuristic method (1990) hold that possibility. It is to our exploration of these methods and the development of a fresh approach to ecopsychology research, that we turn in “The Ouroboros (Part 2)”.

References


See this issue, pp. 61-75


Sheldrake, R. & Smart, P. (2000). A dog that seems to know when his owner is coming home:


**Acknowledgements**

We would like to acknowledge the participants and staff of the WWF Natural Change Project; Rob Preece; Mary-Jayne Rust; our patient partners and; the wild mountains and sea of Glen Prosen and the Knoydart peninsular.

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Appendix 1: The tenets of Positivism

<table>
<thead>
<tr>
<th>Tenet</th>
<th>Description</th>
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<tbody>
<tr>
<td>Naturalism</td>
<td>The principles of the natural sciences should be used for social science.</td>
</tr>
<tr>
<td>Phenomenalism</td>
<td>Only observable phenomena provide valid information.</td>
</tr>
<tr>
<td>Dualism and Objectivism</td>
<td>Objects can be studied without influencing them.</td>
</tr>
<tr>
<td>Nominalism</td>
<td>Words of scientific value have fixed and single meanings. The existence of a word does not imply the existence of what it describes.</td>
</tr>
<tr>
<td>Atomism</td>
<td>Things can be studied by reducing them to their smallest parts (and the whole is the sum of the parts).</td>
</tr>
<tr>
<td>Scientific laws</td>
<td>The goal of science is to create generalised laws (which are useful for prediction).</td>
</tr>
<tr>
<td>Rejection of metaphysics</td>
<td>Only physical phenomena are admitted as valid data</td>
</tr>
<tr>
<td>Separation of facts and values</td>
<td>Values have no place in scientific research. Only facts are worthy of study.</td>
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The Ouroboros (Part 2):
Towards an intersubjective-heuristic method for ecopsychology research
David Key & Margaret Kerr

The Ouroboros has been said to have a meaning of infinity or wholeness... [it] is a dramatic symbol for the integration and assimilation of the opposite (Jung, 1955-6: 513).

Abstract

In part one of The Ouroboros¹ we make the case for an “ontology of interconnectedness” in ecopsychology research. Here, in part two, we lay out our development of an intersubjective-heuristic research method, based on this ontological ground. This method expands Moustakas’ original formulation of heuristic research to include intersubjective enquiry between researchers, ecological contextualisation, social activism, and engagement with the unconscious. In the final section, we address issues of error and validity.

Keywords: Ecopsychology, gestalt ontology, heuristic research, intersubjectivity, unconscious.

Introduction

In part one of The Ouroboros¹ we make the case for an “ontology of interconnectedness” in ecopsychology research, and argue that we need to move away from the myopia of positivist methods. Here, in part two, we lay out our formulation of an intersubjective-heuristic method, based on this ontological ground. We have developed this method through our practice as ecopsychologists over the years, but especially through the design and facilitation of WWF’s

¹ See this issue, pp. 48-60.
Heuristic Method

Clark Moustakas’s (1990) heuristic method is the starting point for our work. His method is based on the philosophies of Gendlin and Polanyi, and follows a structured pattern of engagement and reflection (see Appendix 1). In this section, we will outline the theoretical background of heuristic research, and our perspective on its praxis.

In his existential philosophy, Gendlin (1997) describes two fundamentally separate realms: experiencing and symbolising. Experiencing has an ontological quality and is a continuous feature of human consciousness. Symbolising can represent experiencing in many different ways, but can never fully specify it. For example, the experience of being in a place we love can be symbolised in words, shapes, colours, music, textures, movements and so on. None of these symbols can ever fully “capture” the whole feeling of actually being there, but they can help lead us to a “felt sense” of the experience.

Gendlin’s theory is the philosophical basis of “focusing”, a technique which is used in the discovery process of heuristic research (Gendlin, 1978). In focusing, the practitioner alternately rests in the realms of experiencing and of symbolising. The process is iterative, and takes time, discipline and patience. With each shift between realms, symbolisation is refined: gradually, the momentum of this repeated movement builds up and allows fresh insights to emerge. The understandings that come from this process can be expressed in poetry, prose, sculpture, drawing, music and so on. The diversity of expressive media is much richer than that used in mainstream science.

Polanyi’s concept of “tacit knowing” (Moustakas, 1990) also informs the heuristic method. Tacit knowing is a way of intuitively getting to know the wholeness of something. Polanyi suggested that this happens when “subsidiary factors” (conscious, visible, easily described elements) combine with “focal factors” (which are unseen, implicit and subliminal) to make a complete body of knowledge.

Polanyi's work was influenced by the notion of “active looking” explored by Wolfgang Von Goethe (1749-1832) who, in turn, developed insights from the
Hermetic tradition. Harding (2006) describes how, in this kind of looking, the object of study becomes part of the researcher:

If this works as it should, one can experience the suspension of one’s preconceived notions and habitual responses about the thing being perceived, so that its exact sensorial qualities enliven and deepen perception... One has the intuitive perception of the thing as within oneself, and not as an object outside one’s own being [original emphasis] (p. 34).

We would suggest that the object of our interest does not only live within us: we also live within it. For us, as ecopsychologists, our practice of heuristic method lets us dwell in the unknown interior of the natural phenomena we study, while opening to tacit knowledge. All the while, symbolic, experiential, focal and substantive factors are weaving through us into a pattern that opens our awareness to our part in a greater whole.

It is inevitable that working in this way, we become emotionally intimate with what we study. In a positivist paradigm, this would be seen as antithetical to good science. However, we believe that if we study this intimacy with nature ‘from the inside’, as we feel it, we can start to see how to heal the alienation which has led to our current ecological plight. “The recesses of feeling”, wrote William James, “are the only places in the world in which we can catch real fact in the making, and directly perceive how even events happen, and how work is actually done” (1902: 492 – our emphasis)

As researchers, we share our lives with what we study; we are part of the same ever-changing gestalt; we cannot be separate. As Moustakas says,

…the researcher lives the question in waking, sleeping, and even dream states. Everything in his or her life becomes crystallized around the question (1990: 28).

The process can be like solving a zen koan,

Whether in actual zazen [sitting practice] or in working, walking, eating or sleeping, it becomes his [the practitioner’s] ‘thing’; he becomes a mass of existential concern wrapped around the koan... oneself becomes the koan question to be answered (King, 1970: 311).

Intense engagement with the question happens as a natural part of the research process, and this intensity is needed to produce something. But wrapping around the subject matter too tightly can cut off the flow from unknown into known and the process can become lifeless. As an essential counterpoint to the intense focus,
periods of relaxation and surrender to unknowing are built in to the heuristic method. Phases of surrender happen cyclically in the focusing process, and on a larger scale, in the incubation and contemplation phases (Appendix 1) where we completely come away from the question for a period of time. These smaller and larger openings to the unknown – like breathing in and out – are needed to allow something new to come into life. Relaxation and surrender unclench the mind’s desperate grip on a problem, and allow space, mystery and freedom.

The relaxation phase also protects subtlety. It stops us from crushing our experiences into tight spaces. Braud and Anderson (1998: 4) highlight the need to engage in research “without violating, distorting or trivialising what we are studying”. Similarly, Romanyszyn (2007: 10), in his exploration of “research with soul in mind” says,

something is called for, a way of saying that does not monumentalize the occasion, pin it down with facts, exhaust it with explanations, or imprison it with ideas.

The relaxation phase can feel intimidating; it can bring a fear of the unknown, of becoming lost in infinite space, and at its most primal level – a fear of annihilation. Consequently, some kind of holding is necessary in this phase. Places, people and the method itself can all hold the process and help us feel safe enough to let go into the unknown. For example, not knowing can feel easier if we are sitting on a riverbank talking to someone we trust, instead of sitting in front of a computer alone. And if we are aware that not knowing is an essential part of our method, we can relax into what Keats (1817) called “negative capability” which is,

...when man [sic] is capable of being in uncertainties, Mysteries, doubts without any irritable reaching after fact or reason.

While perhaps radical in the context of the Western scientific tradition, this level of comfort with not knowing is central to the Buddhist and Taoist traditions, which strongly influence our praxis.

Modifying the heuristic method

In this section we describe our modifications of the heuristic method. In addition to the practices described above, we have integrated four interconnected elements that we feel are vital for applying an heuristic method effectively to ecopsychology
research.

These are:

1. intersubjective enquiry between researchers
2. ecological contextualisation
3. social activism
4. engagement with the unconscious

**Intersubjective enquiry**

The heuristic approach sees its participants as “co-researchers”, who help the researcher create meanings and understandings. However, so far, heuristic research has been widely described as a solitary process where a lone researcher “draws it all together”. Perhaps this focus on the individual comes from humanistic psychology's bias towards personal self-actualisation (Maslow, 1971). Moustakas is, after all, a humanistic psychologist.

We have expanded this humanistic method so that the stages of the heuristic process are engaged intersubjectively by more than one researcher (see Husserl, 1929). This collective effort and immersion can liberate the individual ego from fears of opening to the unknown. As any researcher knows, it is easy to become anxious and lose perspective when working in isolation. The companionship of others can help us to relax and widen our perspective. It can also help us to be more creative and playful in our thinking.

However, working with each other in this way does not only provide support, it also generates a creative tension. The intersubjective process is alchemical, dialectical; a potent force for creating something new. Sometimes we come into conflict, but it is in resolving these conflicts that relationship is deepened and new insights emerge.

Human relationships are always charged with unconscious phenomena that can become confusing. Unconscious processes can surface in the form of conflict that is difficult to resolve: they can also lead to collusion. Regular reflection on personal and shared processes, as well as external supervision is very useful in making these processes conscious. But crucially, as ecopsychologists, we also engage with the physical and metaphysical world of wider nature. This, more than anything else, helps us realign ourselves and come into authentic relationship with
each other and with the earth.

**Ecological Contextualisation**

Of fundamental importance in ecopsychology, research collaboration must extend beyond human beings if it is to be authentic. This is well explored in the ecopsychology literature of course, and is now starting to be acknowledged in transpersonal research. For example, Romanyshyn (2007, p153) suggests asking:

What do the other creatures with whom I share creation have to say about the work? Do the animals have a voice in it? The plants, the trees etc.?

Dialogue with our ecological context can help us understand psychological phenomena more deeply. For example, we started a project with a shared focusing session which developed into exploring the felt sense of a red berry. The quality of light filtering through the flesh of the berry helped us to see that we needed to investigate experiences of immanence and luminosity in matter. This insight led to an important - and otherwise hidden - line of exploration which was central to the task in hand.

For us, collaboration with nature goes far beyond the duality of metaphor. Ecological contexts can become synonymous with the unconscious itself. This allows unconscious phenomena to manifest physically and gives us a precious opportunity to explore previously unknown areas of the psyche (For more descriptions of how this can happen in practice, see Kerr & Key, 2012).

In transpersonal research, Jan Fisher (in Braud and Anderson, 1998) describes a parallel process between what is studied and how it is studied. Fisher, who was studying the experience of dance and movement engaged in a similar practice herself before interviewing participants:

By moving prior to the interview, as a researcher, I hoped to stay as closely connected to the material as possible and facilitate my own understanding of the experience of being-movement... I also hoped to establish a coparticipative relationship with the participant... so that I was on an equal footing with the participant and not distanced from the subject of study or from the participant (p. 185).

Right at the heart of our research method is an ecological collaboration with the larger body of the earth – as Fisher would put it, “a coparticipative relationship”.
All the way along, we go into wild nature to test our theories and to surrender in absolute humility to the potential that dwells there. This is an ever unfolding process. Our constant return to the earth is the fertile ground from which our intuitions and ideas emerge.

Social activism

Braud and Anderson (1998) have pointed out that heuristic research does not provide places for “direct social action”. Ecopsychology has emerged to meet an urgent need for personal and social transformation in the face of ecological crisis, so ecopsychology research must lead to social action.

We have found that the transformations we experience, as we open to the research process, support our activism (Key & Kerr, 2011). In this research method, we set a clear intention about the social and political purpose of our work. This intention then catalyses a chain reaction which generates a shared vision for positive social change. In turn, this creates a sense of solidarity and empowerment, and a willingness to make personal sacrifices for the collective good. The camaraderie that we feel also helps us build the same kind of esprit de corps in the groups we work with (WWF, 2009; Key & Kerr, 2011, 2012): this in turn helps them to learn how to support their own activism. The collaborative nature of the process also helps each individual develop a sense of where best to apply their particular talents as part of a team.

Spending time outdoors is an essential part of our activism. It is well documented, (see for example, Hartig et al., 1996; Ulrich et al, 1991; Kaplan & Talbot, 1983) that this provides numerous restorative benefits, and undoubtedly it helps to sustain us in our work. However, we would suggest that time outdoors is more than restorative, it is vital if we are to remain fully present to the ultimate purpose of our work.

We all, I suppose, admire the pioneers who, through endless meetings held in contaminated city air, succeeded in establishing wilderness areas in the United States. But their constant work in offices and corridors has largely ruined their capacity to enjoy these areas. They have lost the capacity to show, in action, what they care for; otherwise they would spend much more time (and even live) in the wilderness (Naess, 1986/1995 – original emphasis).

Because the heuristic method requires us to engage deeply, as we carry out our
research, we experience our own painful reactions to the trauma of our ecological predicament. We also experience joy and empowerment as we become more intimate with each other and with the rest of nature. These feelings keep us close to the primary aim of our work, and its urgency.

The research method we describe here harnesses intuitive and creative insight in service to each other and to the earth. As we see the practical usefulness of these insights in catalysing social change, we gain faith in the unconscious as a source of wisdom that can direct our activism.

**Engaging with the unconscious**

As we go deeper into the research, we go deeper into the unconscious. If we pay heed to the unconscious, it can be a great source of help and direction at all stages in the heuristic process (see Appendix 1). As Clements (1994-1995) says:

> ...methodology often evolves and changes during the research because of synchronicities, dreams, intuition, and other manifestations of inner knowing. The researcher is urged to pay attention to expressions of the unconscious throughout the research process (p. 119).

For example this dream offered us encouragement, and helped us reflect on the pace of a heuristic enquiry that we were engaged in:

> I'm going climbing with Dave [Key]. To get to the bottom of the crag, we have to walk over some sand. It's dark coloured sand, and its consistency means that if you go too fast you come to a halt, and if you go too slow, you sink in. If you go at just the right pace, making progress is no problem (Kerr, personal journal entry 2010).

In his original description of heuristic research, Moustakas did not acknowledge the unconscious as an important motive force in research. This omission may be due to his humanistic, rather than psychodynamic perspective. This is partially corrected in Sela-Smith’s (2002) later reformulation of heuristic method, where she advocates that co-researchers’ experiences can be valuable as reflectors of possible areas of resistance that may be out of conscious awareness in the form of denial, projection, or incomplete search. This sends the researcher back into the self to continue the self-search into deeper or more distant tacit dimensions, thus allowing the transformation to be more expansive (p. 78).

We are transformed by our contact with the unconscious. It is not just a helpful tool
in our research. It acts on us, and we act on it, until ultimately we become “plain citizens” of the process in which we work (Leopold, 1949). The prospect of this transformation can make us apprehensive, and we may try to avoid it – even without realising that is what we are doing. For example, Sela-Smith (2002) suggests that Moustakas (1990) may have shifted the emphasis of his research towards co-researchers and away from himself as an unconscious defence against uncertainty and personal pain. In her description of “Heuristic Self-Search Enquiry”, Sela-Smith reinstates the value of the researcher’s own life experience as a central reference point.

We believe that the researcher's personal pain can distort the heuristic process, and we have described specific ways in which this can happen, in Appendix 1. Krippner and Ryan (cited in Sela-Smith, 2002) suggest that internal structures created by all our experiences, woven into tacit knowledge, in the form of a “personal myth”, act as a “chaotic attractor” which pulls towards it experiences and interpretations which in turn support the existing structures of the researcher’s psyche. This principle is well known in psychotherapy. Our own past experience, particularly if it is traumatic, influences how we see the world (for example, Casement, 1985; Stewart and Joines, 1987; Young et al 2003). Also, as Peter Homans (cited in Romanyshyn, 2007: 14) points out, our cultural past – if it becomes ossified – can create a block to seeing clearly or moving freely:

our cultural monuments become problematic when the monument takes the place of the experience, and relieves us of the work of mourning and remembering.

However, whilst acknowledging that there is “an ethical imperative to make the complex process of research as conscious as possible, just as there is in therapy, in love and in life” (p. 136), Romanyshyn, far from seeing our own wounds as a problem in research, sees them as a deep creative source and strength. The personal myth is still a chaotic attractor, but one which draws the re-searcher back on a journey to find “what has been left behind” – the untold stories or neglected mindscapes of the researcher's childhood, family, land, culture, and so on.

Romanyshyn's formulation echoes an older way of knowing – the shamanic traditions, where strands connecting us to our ancestors, to our ecological context, and to ancient or archetypal stories are honoured as allies in understanding and healing the present. We would suggest that remembering our personal, collective
and ecological wounds, in both conscious and unconscious domains, is a vital source of motivation for ecopsychology research. As researchers, practitioners, and activists we need to be able to go into the darkness with a clear eye and an open heart. This gives us the best chance of understanding and healing these wounds. However, we not only need to remember our wounds. We also need to remember the joy we feel personally and collectively when we reconnect with our ecological selves. Ultimately, this joy is both our touchstone and our source (Naess, 1973).

**Validity**

Like quantitative research, qualitative research must address the question of error. Error in the positivist paradigm refers to something that does not faithfully reflect the one truth of “how things are”. But what we mean by “error” is inextricably linked to what we mean by “truth”. Positivism is based on a hidden assumption that the universe is infinitely comprehensible, and ultimately explicable by one unifying truth. The philosopher of science, Nicholas Maxwell (2002) describes this assumption as “neurotic” and indeed, it is hard to see how there can be any rational grounds for it.

In contrast to the positivist assumption, we would allow that the universe is mysterious, and that truths can be multiple, even paradoxical. “It is the hallmark of any deep truth” writes Nils Bohr, “that its negation is also a deep truth” (Delbrück, 1986: 167). In the context of psychological enquiry, Jung writes of this delicate subjectivism, “All the true things must change and only that which changes remains true” (Jung, 1955-6: 503).

From this perspective, “truth” is contradictory, ephemeral and infinitely relative. Obviously though, we believe that it is important to attempt to validate our work somehow! We need to work as part of a community where some notion of intersubjective validity operates.

We hold with Lincoln and Guba’s (1985) suggestion that qualitative methods should include ways of “establishing trustworthiness including credibility, transferability, dependability and confirmability”. To do justice to these values, we follow methods such as prolonged engagement, persistent observation, triangulation, intersubjective reflection, and peer supervision. In addition to these usual methods, we also use the tenets of transpersonal validity advocated by Braud
and Anderson (1998). These include reference to bodily reactions, intuition and emotions – especially in focusing (Gendlin, 1978).

We are also aware of the important caveat that unconscious processes such as transference and projection can apparently come in on the same “frequency” as intuition, bodily reactions and emotions. Much of the subtle work in transpersonal psychotherapy uses this frequency. Often (but not always) it is possible to learn how to distinguish the “fools’ gold” of processes like transference from the “real gold” of embodied and intuitive insight. In our experience, unconscious processes often have an incongruent feel when tested in the context of the here and now, even if the bodily and emotional senses they invoke are very strong. Intuitive interpretations always need to be offered tentatively, and need to ring true with their recipient. In our view, this is one of the great strengths of intersubjective exploration – we can test out our intuitions with each other. Of course, as we noted before, there is always the possibility of collusion in this testing. This is where external supervision, the touchstone of wider nature, and the validity procedures already described offer vital protection.

Finally, to return to our earlier assertion that the aims of ecopsychology research must be grounded in social action: we would agree strongly with Braud (1997) that, “The criterion for acceptability of a knowledge claim is the fruitfulness of its implementation” (p. 162). This resonates with Maxwell's (2002) observation that, by expurgating values from science, and concentrating on “facts”, positivism has left researchers powerless to determine the use to which their discoveries will be put: it has “neurotically” denied the place of research in the political sphere. Maxwell calls for an “intellectual revolution” to free academic enquiry from its neurosis, and argues that:

... the fundamental intellectual and social aim of academic enquiry... ought to be to promote wisdom, where wisdom is defined as the capacity to realise what is of value in life, for oneself and others (pp. 34-35).

Whilst Maxwell calls for personal and social action, as ecopsychologists we would extend this. We believe that the ultimate test of our work will be the activism it inspires in service of the earth.

References


**Acknowledgements**

We would like to acknowledge the participants and staff of the WWF Natural Change Project; Rob Preece; Mary-Jayne Rust; our patient partners and; the wild mountains and sea of Glen Prosen and the Knoydart peninsular.

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Appendix 1: The stages of the Heuristic Process and the role of the unconscious

<table>
<thead>
<tr>
<th>Stage / Description</th>
<th>Unconscious – hindrance</th>
<th>Unconscious – help</th>
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<tbody>
<tr>
<td><strong>1. Initial engagement</strong></td>
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<tr>
<td>Discovery of a research question which has intense personal interest for the researcher.</td>
<td>Personal pain linked to the research project may shift the focus to something less threatening. An unconscious drive to resolve the painful question may persist, and split the focus.</td>
<td>Unfinished business or wounds in the researcher's personal life or culture may draw the researcher into passionate engagement with the research question</td>
</tr>
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</table>

| **2. Immersion** |
| Intense focus on, and “living inside” the question. |
| If the research is not central to the researcher’s concerns, and has been undertaken, for example to fulfil institutional or organisational requirements, immersion will not be possible, as the unconscious conflict between personal and organisational needs will sabotage the process. The researcher’s own past experience may create unconscious distortions in the direction of focus. If the question is central to the researcher's concerns, its pull may be so strong that the researcher becomes submerged in the process. |
| Opening to the research question as a vocation – a call from the depths of the unconscious can provide powerful energy to deepen the immersion process. This requires a supportive and nurturing institutional and personal environment, and a sense that it is safe to surrender to this process. |
3. **Incubation**

Retreat from the question.

Researchers may fear that if they retreat from the question, they will lose motivation and fail to complete their research. The sense of meaning, completeness and life given by engagement with the question may make it hard to pull away. There may be a painful sense of loss on withdrawing from this depth of engagement.

The unconscious may make it obvious that a time of rest and letting go is needed. For example, ideas may dry up for a while. There may be a sense of flatness or closing down.

4. **Illumination**

Naturally occurring intuitive insight and spontaneous elucidation of the phenomenon.

If previous stages are incomplete or not wholehearted, illumination will not occur.

Knowledge of the dynamic of the unconscious, and a willingness to open to mystery can allow new understandings to emerge.

5. **Explication**

Full examination of what has emerged into consciousness in the previous stage.

If the major source of data is not personal, but is focussed outside on the experience of others, the phenomenon cannot be felt from the inside, and therefore cannot be authentically explored in the researcher’s own subjectivity.

The researcher’s own past experience may act as a “chaotic attractor” for particular interpretations.

If the unconscious is allowed to move freely through the researcher into the explication, the researcher may experience a sense of “a resonance so harmonious that it would be... hard to say who is writing and who is being written” (Romanyshyn, 2007: 17).

6. **Creative synthesis**

Holistic expression of conclusions

If the researcher is lacking in self confidence, or has previous trauma surrounding creative expression, the full unfolding of the final phase may be choked.

Opening to the unconscious can allow free flow of creative expression.
The Ecopsychologist

In memoriam Theodore Roszak, 1933-2011

Helen Moore

When in obedience to a narrow reality principle, we make the non-human world less than it is, we also make ourselves less than we are. More of the mind is split off and driven into that zone of impermissible experience called “insane” (Roszak, 1992: 81 – Voice of the Earth)

With the giant hands of a post-industrial Renaissance man who knelt in floor-to-ceiling temples of visionary books, complex forests, flew to eyries, strode with magma for legs, you reached into my head, parting waves of left and right brain – and there, in the rocky depths put a finger on the primal umbilicus – that psychic cord which links me to Alma Mater, Earth.

For centuries I’d been taught to shovel dirt against this holy portal – spade after spade, information hoarded for the sake of information, piles of disenchantment that built a vast dam, a numb wall imposed on the topography of my inner world. And how impregnable this citadel of single vision, thought reduced to boxes, compartments!

Divided from myself – and from the source of energy that keeps the soul vital, rooted in its wider body – I felt grey, weak, desperate.
But your mental medicine became a hurricane blowing in my mind, and your words sparked a green fire, stoked a wild desire to tear down the edifices junking my horizon.

At times nightmares came seething through the cracks, but I’d learned to see them all as facets of collective Dreaming – to thirst for drops of this oneiric fluid in which the ego swims. Clear streams now pour through the rubble, and I taste an intelligence held across millennia – how to be both human and nature.
**PRACTICE**

Opportunities to explore nature and wellbeing through kayaking for inner-city youth

Daniel R. Tardona

*Timucuan Ecological & Historic Preserve*  
*United States National Park Service*

**Introduction**

The Health and Recreation Committee of the United States National Park System (NPS) recommended that the agency undertake 7 pilot projects in 2007 to determine how the NPS could effectively implement key objectives of a Healthier US Initiative focused on the health benefits of physical recreational activity in national parks. One of the 7 pilot project parks was the Timucuan Ecological and Historic Preserve (TEHP) in Jacksonville, Florida. For a complete overview and synthesis of findings of the 2007 pilot projects please see Hoehner et al. (2010). In subsequent years (2008 through 2010) the TEHP program continued with additional emphasis on providing opportunities for program participants to experience the wonder and appreciation of nature as well as discover the ecopsychological benefits of nature associated with a marsh and near-shore coastal environment. The TEHP is located entirely within the city of Jacksonville, Florida. Like many urban environments, Jacksonville contains an undeserved urban and economically disadvantaged community. All cultural and natural history resources within TEHP are influenced by water. Of the 46,000 acres contained within TEHP, approximately 30,000 acres are coastal wetlands created by the mixing of fresh water of the St. Johns River and the salt water of the Atlantic Ocean. The best way to make contact with marshland and near-shore nature within the TEHP is shallow draft, non-motorized watercraft such as kayaking. While many land based sites within TEHP are accessible to members of the local community, the wetland and coastal environment access is severely limited to economically disadvantaged
inner-city youth because of cost and transportation. Ethnic minorities are less likely to participate in outdoor recreation or value government involvement in the provision of such services (e.g., Ho et al., 2005; Sasidharan, Willits, & Godbey, 2005). The level of TEHP visitation and especially kayaking was expected to be very low in this target audience (Shinew, Floyd, McGuire & Noe, 1996; Wolch & Zhang, 2004; Floyd et al., 2008).

Humans have increasingly disengaged from the natural environment with an enormous shift away from rural areas into more urban environments (Axelrod & Suedfeld, 1995; Beck & Katcher, 1996; Katcher & Beck, 1987). Research is indicating that exposure and experiences in nature can improve wellbeing and can help relieve stress (Kaplan & Kaplan, 1990, 1989; Ulrich et al., 1991; Hartig, Mang & Evans, 1991; Kaplan, 1992, 1995, 2001; Lewis, 1996; Herzog & Stevey, 2008). People who go to parks, wilderness areas and rivers visit for many different reasons (Manning, 1999). For example, people float rivers to view scenery, find peace and calm, learn new things, develop skills, escape crowds, exercise, and to be alone (Knopf & Lime, 1984).

Research focused on the relationship between ethnicity and participation in various outdoor nature based recreational activities with regard to the physical health benefits have been carried out (for example: Bass, Ewert & Chavez, 1993; Carr & Williams, 1993; Johnson, Horan & Pepper, 1997; Floyd, 1998; Floyd, McGuire, Shinew & Noe, 1994; Floyd & Gramman, 1993; Floyd, Gramman & Saenz, 1993; Loukaitou-Sideris, 1995; Philipp, 1998; Shaull & Gramman, 1998; Wolch & Zhang, 2004). Few if any studies have focused specifically on the interplay of outdoor physical activity and the ecopsychological benefits of water-based recreational activities with under-served urban youth. In general lower rates of participation by some minority groups are attributed both to limited economic resources and to differences in norms, value systems, and socialization patterns (Floyd & Gramann, 1993). A particularly important segment of this target community is young children and teens belonging to ethnic minorities. It is this segment of the under-served urban and economically disadvantaged community that is most needy of nature-based outdoor recreational opportunities that not only encourage outdoor physical activity but exposure to the ecopsychological benefits of the coastal water based natural environment. Urban environments, especially for those economically disadvantaged can be quite stressful. It is not surprising that
antisocial behavior is a common reaction to stressful situations and spending time in nature or viewing nature appears to reduce stress and may influence the reduction of aggression and violence (Kaplan, 1995). A growing body of research suggests that contact with nature not only positively affect blood pressure and cholesterol but also improve life outlook, and reduce stress and behavioral problems among children (Moore, 1981; Kaplan & Kaplan, 1989; Ulrich et al., 1991; Kaplan, 1993; Frumkin, 2001). A particularly important segment of the Jacksonville, Florida community is young children and teens belonging to ethnic minorities (primarily African American). It is this segment of the under-served urban and economically disadvantaged community that present with the greatest need for recreational opportunities that promote physical activity and recreation and exposure and experience with the natural world.

The TEHP Inner-City Youth Kayaking Program

The TEHP intervention strategy involved developing and establishing a programmed ranger guided water-based nature activity for inner-city economically disadvantaged youth in Jacksonville, Florida. The program provided basic skills and experiences for safe kayaking in the preserve waters. The program was designed to promote confidence in a water based outdoor activity while offering access and exposure to the natural history of marsh and near-shore environments only accessible by water.

The program engaged 129 children ranging in ages 9-17 with a mean age of 12.2 years, in the summers of 2005 through 2010. All of the children were African American and live in subsidized housing communities. Rangers working the program estimated that approximately 65% children had never seen the ocean and 100% never visited the Timucuan Preserve.

Each group 6 to 10 children experienced a single six hour day that included basic water safety, how to wear a life jacket properly, use a kayak paddle, use of a safety whistle, how to enter and exit a kayak, and how to get a kayak to move safely through the water to get from one place to the other. The participants were paired using the “buddy” system. The lead ranger explained to the group the each buddy was to maintain close proximity to the other, check each other for safety and to alert one of the rangers to any difficulties either child might encounter. It was stressed that all participants in the program were to take care of each other.
After about an hour of practice, a healthy lunch and hydration with water, a three-hour guided kayaking trip on the waters of the TEHP was accomplished. The trip consisted of paddling through marshland, then through open water to a near-shore sand bar. The children experienced a variety of marshland vegetation and birdlife. In the more open waters they observed oyster reefs, fish and occasionally a dolphin or manatee. At the sandbar the participants observed scurrying crabs, roosting shorebirds and a plethora of sandbar invertebrates. The visits were always done with appropriate interpretation by rangers with an emphasis on leaving little human trace in as least disturbing way as possible. The children then spent time swimming (with life jackets on) and exploring the wonder and simple beauty nature has to offer before returning to their boats for the return trip. At the conclusion of the trip the participants were encouraged to report their discoveries and reflect upon the day’s activities. This activity was conducted or monitored by a park ranger with advanced degrees in psychology with environmental/ecopsychological interests.

**Program observations, challenges and lessons learned**

Contrary to our expectations and the fact that 42% of the participants reported not being able to swim, all of the participants without fail, took an immediate interest in the water and the kayaks once they arrived at the site. No participants resisted getting in the kayaks and paddling after training. Prior to the training and the trip experience, 28% of participants expressed that the prospect of paddling a kayak as exciting (vs. boring) for them, while 24% expressed that the prospect of paddling a kayak as scary (vs. not scary). Some participants stayed close to shore initially; however, every participant eventually paddled with the group. All the children were observed to pay close attention to instructions, consistently helped each other get into the boats, reminded each other to stow gear, drink water, secure their paddle or assisted others when they became stuck in shallow water. Rangers reported that many of the children appeared awed and moved by the exposure to being able to kayak and experience the water environment. All the participants expressed a desire to participate in similar water and nature based activities in the preserve and reported that kayaking was neither boring nor scary at the conclusion of the day.

It should be noted that male participants greatly outnumbered female participants (only 17% were girls). We offered the program to all children regardless of sex, but
did not actively attempt to recruit boys or girls. No obvious differences in behavior between boys and girls in the program were observed with the exception of occasional flirting and minor teasing, but nothing disruptive to the overall program experience was noted. The enthusiasm about their experiences of the day and confidence in kayaking expressed by the female participants did not appear any different from the boys. It would be important in future programs and research to examine why more boys than girls in this population participate. Systematic observations of behavior with regard to gender should also be carried out throughout the program. In general, all participants in this program were open to sharing any apprehensions they may have had and were enthusiastic about the challenges of kayaking and experiencing the natural environment.

While no systematic survey was conducted with participants at the conclusion of the program, based on observed behavior by ranger staff and self-reports of the participants, the children enjoyed the activities, gained confidence in a water-based recreational activity, and gained an appreciation for the coastal natural environment. In addition, letters were received from many of the children expressing how much the programmed was enjoyed. Rangers also reported spontaneous expressions throughout the program such as “cool”, “awesome”, “tight”, “makes me feel calm”, “makes me feel brave”, and “I feel good”.

The scheduling of the programs was limited by the tides and the necessity of avoiding weekend days (due to high motorboat and jet-ski traffic). This constrained the timing of our programming and greatly reduced opportunities for flexible rescheduling. As a result, when hazardous weather presented itself, the program was cancelled and rescheduled which affected how many program could be offered over the summer months. Approximately 10% of the programs had to be rescheduled due to weather conditions.

It was imperative to promote the program at local community centers and through church groups. To this end, we conducted on-land kayak demonstrations in the housing community centers. Funding. In addition, we forged good relationships with the community center directors and staff who actively participated in the program themselves who then passed on their positive experiences to the community at large.

Most of the children reported that they would enjoy returning to the park and kayaking but that transportation to the park would have to be provided for them.
We could not reasonably expect the children’s family members to have the transportation to the park, which is a 20+ mile drive from their neighborhood with no public transportation available. This finding is consistent with studies that have shown that affordability, transportation and safety are often barriers for low-income households’ use of parks for recreation (Scott & Munson, 1994; Moore, 1966). We established the components necessary for forging a strong relationship with partners of the project. We now have a model for setting up the relationships and solidifying the commitment of the partners in the project, namely with regard to the community groups, a kayak tour operator and the park. It is hoped that a community sponsor will emerge who is able and willing to sponsor individual family transportation for a future kayak tour for each former participant of this program.

There is increasing understanding that humans are dependent on nature for emotional, psychological, and spiritual well-being (Wilson, 1984; Katcher & Beck, 1987; Kellert & Wilson, 1993; Roszak et al., 1995; Friedmann & Thomas, 1995; Kellert, 1997; Frumkin, 2001; Wilson, 2001). Ecopsychological understanding of how people from different ethnic, cultural and socioeconomic backgrounds as well as urban, suburban and rural settings interact with and benefit from various elements of the natural world are just starting to be explored systematically. Parks and park rangers can be part the efforts to promote physical health (Wong & Higgins, 2010) and emotional wellbeing by providing opportunities for visitors with diverse cultural backgrounds to form their own intellectual and emotional connections with meanings inherent in the natural world. Systematic evaluation of nature-based ecopsychological intervention programs such as described in this paper might offer insights and generate important research hypotheses and as generate ecopsychological approaches promoting human well-being. Such efforts may also lead to increasing support for environmental sustainability among different ethnic and socio-economic groups.

References

West Lafayette, Indiana: Purdue University Press.


**Acknowledgements**

Special thanks are due to the National Park Service and Barbara Goodman, Superintendent of the Timucuan Ecological and Historic Preserve for continued support of the kayak program and to Dr. John A. Eisler and ranger Chris Williams.
for assistance with behavior observations and insights on earlier drafts of the manuscript. I thank rangers Cicely Pontiflet, Rhonda Jean Monts, Christopher Janssen, Nicole Galluci and Craig Morris with assistance in running the program. I especially thank Ray Hetchka of Kayak Amelia for his invaluable knowledge of the waters around the Timucuan Preserve as well as his assistance with running the program. I am grateful for the comments and suggestions of Dr. Paul Stevens and of two anonymous reviewers of the manuscript. Finally, I thank all the children who participated in the program who through their expressed joy and appreciation for participating in the program provided me with incredible satisfaction and feeling that the kayak program is making a difference.

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INSIGHTS

Natural mythopoesis in the forest school context

Helen Moore

Forest School leader and ecopoet

It’s a chilly March day, the Sun glimmering weakly above the old Bramleys in the orchard. Inside our story den – a branch-and-tarp-covered structure – I’m outlining the narrative of today’s story-quest with a small group of children, aged 5 to 8.¹

“In our story,” I begin, lowering my voice to draw them in, “There’s a Winter King and his goblin followers. The Winter King has captured the Spring Princess and has been holding her prisoner all Winter. Meanwhile Mabon, the Sun Hero, and his band of adventurers find out where she’s being held and plan to rescue her. So they build a special bower for her, and then set off to the Winter King’s palace. They can’t hurt the Winter King, or any of his goblins, because he’s an important part of the year; also, the Spring Princess is under a magical spell, which makes her want to stay. And so, Mabon and his friends have to persuade her to leave. Then, they have to bring her back to their bower without her feet touching the ground, otherwise she’ll fall back under the Winter King’s spell. And that’s it! Over to you!”²

At this the children begin clamouring to choose their roles. Daubs of face-paint and

¹ *Wood Dragons*, our Forest School group meets weekly for whole day sessions with mixed age groups of up to 12 children

² This story quest was adapted from John Hodgson and Alan Dyer’s wonderful book, *Let Your Children Go Back to Nature*. In this particular story, gender roles are rather traditional and I have accepted them as such, in large part because the two girls in our group are at the younger end of the age spectrum, and are not sufficiently confident to participate more dynamically. However, as I hope the other examples of story quests in this account will indicate, I try to vary the way that the children interact, often through teamwork with ungendered characters, e.g., as elements, and ultimately I hope that as the girls’ confidence grows, they will take on leading roles in our story quests.
coloured strips of cloth denote the different groups, and then they set about organising themselves, the Winter king and his blue goblins making an ice palace, while Mabon and his adventurers, adorned with yellow headbands, start building a pathway leading towards the Winter King’s quarters.

Throughout the preparations, I’m on hand, along with my colleague, to observe, encourage and, where necessary, to facilitate their ideas. Finally the children are ready to begin, and the story is enacted. Mabon and co are somewhat shy with their persuasive language, but at last they encourage the Spring Princess out of the ice palace and she makes it along a series of improvised steps to the bower, where the adventurers welcome her.

Moments later, specks of snow start to fall and the boy who’s been playing the Winter King races up triumphantly shouting, “See, my magical powers haven’t all gone!”

This is my favourite moment in the whole process. It shows me that the children have integrated the story and, in spontaneously responding to the sudden change in weather, this child now has a deeper awareness of the movement of the seasons, how they tend to blur, teeter back and forth before establishing their pattern. Later, during their free play, I hear the children incorporating characters from the story-quest into their games, and am gratified at how this serves to extend their imaginative range.

In the tick-box world of mainstream education, I’d justify the activity by enumerating the range of experiences from which the children were benefiting – physical movement, practical skills, language development, teamwork, social and emotional development. But within the Forest School context, a significant reason for sharing stories that relate to the natural world is because I believe they contribute to the child’s ecopsychological development.

This, I hope, will nurture his/her expanded sense of self, which understands our deep interdependence with the Web of Life and the cycle of the year. Being outdoors all year round, Forest School children become adaptive to all weathers and learn the self-responsibility of dressing appropriately (something the Scandinavians, who pioneered nature nurseries, have long understood.) And by witnessing changes in weather, light levels, temperature and the natural world around them, they begin to develop the “ecological self” inherent in a more Nature-
based culture than our own.

When story-quests haven’t featured in our sessions for a while, I notice that the children’s play becomes characterised by guns and warfare, with the boys in particular enacting violent characters. Seeking “enemies”, the children can become polarised, and aggression sometimes builds between them. I wonder if this is just a “natural” stage in child development? Then I consider statistics such as that the average Western child is likely to have witnessed over 18,000 murders and 100,000 acts of violence on TV by the time they finish their schooling, and ask how this affects them?  

One day my colleague and I could see that the aggression was spilling over into real conflict, and so in the next session I introduced a story-quest with the objective of reuniting the group. This time it involved one tribe composed of the 4 elements. We began by talking about them, dispelling any preconceptions that fire was best by looking at how they interact. Having chosen 4 colour-coded groups, the children then ventured into the woods where they met Artemis – a puppet who requested help in freeing her protecting Dragon from a spell. Played by an adult, the Dragon had been bound with “chains” (Goosegrass served well for these), and could only be freed if the tribe worked together to accomplish a series of elemental tasks.

Again the story influenced the children’s play that day, some retaining their elemental characteristics, and on occasion reminding each other, “We all have to work together!” This not only helped to dispel the dynamics of the previous session, but I could also see that the story was contributing to their imaginative capacities and potential for myth-making.

Since each session is responsive to the seasons, weather, needs of the site and interests of the children, our practice of mythopoesis has worked its way into all sorts of activities, even our practical skills. Noticing that the hurdle which had served as an entrance/exit along one of the orchard’s boundaries had collapsed, we decided to involve the children in constructing a new gate. Beginning in January, we encountered Janus, Roman guardian of gates and doors, and in pairs became living statues looking forwards into the future, and backwards over the past year.

Then, having studied the parts of doors and gates, the children embodied a gate with posts, hinges and a latch, and practiced some designs. Later we coppiced

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3 See Rose Dyson, *Mind Abuse: Media Violence in an Information Age*
some Hazel and, over the course of the month, worked on knots and lashings. Finally, our two simple gates were inaugurated in situ with a simple ceremony improvised by the children, and culminating with cries of “Open sesame!” This not only served to mark the group’s achievement, but endowed the whole process with rich meaning – far more than could ever be discovered in a trip to the local DIY store!

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Volume 2, 2011
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