

A Phenomenological Self-Inquiry into Ecological Consciousness

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Abstract

While many of the issues associated with the global environmental crisis are facilitated and worsened by globalized economic, financial, and social systems, at a more fundamental level they arise out of the dominant Western consciousness that lacks empathic connection and identification with nonhuman nature. Research suggests that an individual's sense of connectedness with nature significantly influences environmental concern and behavior. Ecological consciousness is a form of consciousness that is characterized by a psycho-spiritual connectedness with nature; however, a structured approach to its development has not been clearly articulated from a lived-experience perspective. This article explores the heightened state of ecological consciousness from a phenomenological, self-study perspective. A structured mindfulness-based perception exercise was developed to deepen nature connectedness and to evoke heightened ecological consciousness within a variety of natural settings. Thematic analysis of exercise worksheets found that heightened states consisted of psycho-spiritual experiences of connectedness facilitating spiritual meaning, ecological awareness, and therapeutic outcomes. Experiences of heightened states were characterized by 16 thematic categories and a spectrum of consciousness states. The evocation of heightened ecological consciousness has implications for not just the practices of environmental educators and psychotherapists, but also for individuals seeking greater connectedness and a nature-based way of coping with a variety of negative psychological states.

We are witnessing an unfolding global environmental crisis that is undermining the sustainability and long-term viability of Western civilization (Bahro, 1994; Gore, 1992, 2006; Millennium Ecosystem Assessment,

2005; Suzuki, 1997; United Nations Environment Programme, 2009; Worldwatch Institute, 2009; World Wildlife Fund, 2008). Many of the issues associated with this crisis have their roots in our modern, anthropocentric consciousness with its lack of direct connection and identification with nonhuman nature (Devall & Sessions, 1985; DuNann Winter & Koger, 2004; Naess, 1989; Stern, 2000; Williams & Parkman, 2003). Our disconnected consciousness creates, and is reinforced by, organizational and systemic structures, systems, and processes that undermine the ecological sustainability of human endeavor (Bradbury, 2003).

The reasons for our environmental destructiveness are complex but an important cause is our experiential alienation from the nonhuman world and our reluctance to acknowledge our total dependence on ecological well-being for our continued existence. Many writers have argued that humanity's consciousness needs to shift towards a more respectful, relational and participatory form if we are to encourage and sustain a more harmonious relationship with the nonhuman world (Bahro, 1994; Capra, 1996; Fisher, 2002; Kidner, 2001; Laszlo, 2006; Naess, 1986; O'Sullivan & Taylor, 2004; Reason, 2007; Roszak, 1992; Roszak, Gomes, & Kanner, 1995; Shephard, 1982; Williams & Parkman, 2003). This form of consciousness can be labelled an ecological consciousness, or eco-consciousness. Transforming our alienated consciousness towards this more connected, eco-spiritual form of consciousness holds potential to shift not just destructive behaviours and systems but transform our concepts of nature and self.

This article explores the phenomenon of ecological consciousness from a first-person, experiential orientation. More specifically, it describes what can be viewed as a pilot project that sought to trial a mindfulness-based perception approach to deepening nature connectedness and evoking heightened states of eco-consciousness. As a pilot project, its purpose was to trial the new approach on the author to assess its effectiveness and weaknesses in terms of facilitating nature connectedness and eco-consciousness with a view to refining it and undertaking a group phenomenological study with participants

representing a broad socio-demographic. Given that the author is of a particular socio-demographic background, this study could be viewed as an auto-ethnographic exploration of eco-consciousness in which no claim about its broader efficacy or appeal can be made.

An interpretive phenomenological methodology framed this exploration of eco-consciousness, including the development of a structured, experiential exercise used to evoke this phenomenon. While the described themes of experience have limited transferability, it may however inform those interested in human-nature connectedness such as environmentally oriented psychotherapists and environmental educators that this structured approach may offer people an alternative framework for connecting with “nature” and, through connection, help deal with the stress, anxiety and other inner conflicts many people are attempting to cope with. The theoretical context and implications of this article lie outside the scope of this paper. One of the motivations for exploring this phenomenon was personal authenticity: if, as a change agent, whether through activism, education, or writing, I am arguing for the need to shift our collective consciousness through deeper nature connectedness, it may be more persuasive if it is based on direct experience of the phenomenon. In other words, to paraphrase the well-known exhortation by Mahatma Gandhi, you must be [and understand] the change you wish to see.

Ecological and environmental consciousnesses: one and the same?

The term, “eco-consciousness”, is linked with deep ecology, a social movement that arose in the early 1970s which views the ecological crisis as resulting from an ecologically alienated consciousness and values, as well as a restricted conception of self (Naess, 1973). The concept of eco-consciousness has since been further developed or referred to (sometimes by other names) by other environmental writers (Beck, 1995, 1999; Bragg, 1996; Devall, 1988; Devall & Sessions, 1985; Drengson, 1989; Hill et al., 2004; Leff, 1978; Milbraith, 1984, 1989; Morris, 2002; O’Sullivan & Taylor, 2004; Uhl, 2004).

According to Christopher (1999), the term “ecological consciousness” was developed by deep ecologists to philosophically differentiate from the more mainstream term “environmental consciousness.” Each term appears to be conceptualized differently. The “mainstream” environmental consciousness is based upon the dominant disconnected, de-sacralized relationship, values, and beliefs towards the natural environment. This type of associated consciousness tends to view nonhuman nature as largely insentient and of value in its functionality to the needs of humans, a set of resources to be efficiently or “sustainably” managed, generally using cognitivist, behaviorist, economic, and/or managerial approaches.

This perspective, while shared in different cultures and societies in different historical eras, has particularly strengthened since the Industrial Revolution and increased during the consumer revolution in the past half century. This detached perspective is in large part based on an anthropocentric value orientation that accepts current political and economic systems (with efficiency modifications) and seeks to mitigate and manage the impacts of human activities (Christopher, 1999). It treats nature as a separate, lower entity to be exploited, abused, and enjoyed, as required.*

In contrast to environmental consciousness, eco-consciousness is grounded in an eco-centric, transpersonal orientation that can be understood to have the following characteristics (Christopher, 1999; White, 2009):

- a deep awareness of one’s biological, ecological, affective, and spiritual connection to nonhuman nature;
- personal identification with nonhuman nature;
- intrinsic valuing of nonhuman nature;
- a deep concern about the destruction of our natural environment and dealing with this through rational understanding, activism, and in preralational, affective, and psycho-spiritual ways;
- interest in Self-realization[†] that includes meaningful engagements with nonhuman other;
- understanding that our global environmental crisis is driven by the dominant globalized, industrial, consumer modernity with its disconnected consciousness; and
- a tendency to cope with global and personal concerns and meaning beyond humanity through experiential, affective connections with natural settings.

This description of eco-consciousness, however, relates to its overall characteristics in an individual’s day-to-day level of con-

*It should be noted here that the experience of eco-consciousness has been prevalent over millennia in indigenous cultures, early agricultural societies, and the first civilizations. Hughes (1991) argues that many primal or indigenous societies exhibited eco-consciousness, an awareness of the intimate, spiritual connection of the self with all of nature and a reverential recognition of the sacredness and sentience of life.

[†]Self-realization refers to an on-going process of identifying with a larger Self beyond the individual personality or ego. The “Self” is not the “self” of the individual ego but refers to a person’s Being, a soul, a more expanded and nonphysical consciousness. Through an expanding process of identification with all of nature, especially nonhuman nature, one comes to understand that we are part of nature and identify with greater wholes without diminishing or merging the personality self.

sciousness, their psychological structures (e.g., understandings, affective states, spiritual beliefs, and memories), and awareness of their reality, from an environmental perspective. I have termed this “durable eco-consciousness” (White, 2009). As a map should not be confused for the reality, so should this description not be relied upon to understand the actual experience of what I term “heightened eco-consciousness,” the brief altered state of consciousness that is the focus of this article. It is more challenging to evoke, observe, and describe the actual experience than to list general descriptors that, like a map, do not capture the essence of the lived experience. While the written word cannot replace the direct experience of meaningful connection, it can capture the flavour, the essence of the experience for later sharing or remembering that is perhaps more evocative and indicative of an experience of eco-consciousness than the list of descriptors or qualifiers above. To illuminate this point, in Figure 1 is an extract from a narrative that I wrote in a wilderness area that was

part of the mindfulness exercise I developed to explore the experience of heightened eco-consciousness. While it is just an extract from a response in one activity, mindful connection, within the exercise, it more evocatively conveys the central characteristics of heightened eco-consciousness than perhaps the more conceptual ambiguity of meanings potentially interpreted from lists, such as the one above.

Method

A structured, experiential exercise based on mindful perception was developed by the author to induce deeper nature connectedness and explore heightened states of eco-consciousness. The MAPIN exercise, standing for Mindful-Affective-Perception-in-Nature (MAPIN), consists of a series of activities aimed at increasing perceptual acuity, increasing environmental awareness, and deepening nature connection. Its development was informed by the works of

Connecting: I am immersed in the wilds of the Kanangra-Boyd* wilderness landscape, sitting upon a lichen covered rock outcrop jutting out over the deep, carved out valley with the Kowmung River beneath me in the distance. The deep, steep valley beneath extends into the olive green, then indigo rugged, landscape stretching out into the hazy distance. No human intrusion can be observed or heard. In this spacious, timeless state, I sense wonder and appreciation arise for this ancient landscape’s vast beauty and naturalness. Wonder and presence intersect with memories of domesticated landscapes stealing their way into my fluid awareness. The memory I hold of rural and urban landscapes contrast with my immediate surrounds. They dominate much of the earth’s land surface elsewhere but they seem another planet away. I observe and let go of these distracting memories and return to where I Be. I am deeply appreciative that this wildness exists, part of its value being to do with its rarity and preciousness, another part being its nonchalance to my insignificant being-ness. The layer upon layer of this wild ruggedness leads to a connecting, humbling emptying of self and thought. The “me” steps aside, bows down in reverence to allow a sense of some vaster inner beingness to arise into my stilled mindful awareness. I am humbly sitting before a sacred Being, a vast creation of the divine, a mystery within this vast complex unknown that I barely perceive. I sense the insubstantial nature of my personality self and yet its important role in experiencing the mysterious wildness that has immersed me. As I connect with this place and dwell within the freedom of its elemental space, I feel its immensity and Beingness permeate my consciousness until a vast space opens up within me, a tangible, connected, at peace consciousness that communes, where one plus one equals one(ness). I treasure this connection. This state of heightened eco-consciousness that I am now experiencing includes an awareness of some vast inner beingness beyond my enculturated, individual physical self. There is a Self within a self existing beyond the illusory boundaries that appear to separate all. This expanded state of consciousness arises from a mindful, sensorial engagement with the vast, pristine spaciousness of this wild place.



Fig. 1. Extract from a narrative written as part of a mindfulness exercise. *Kanangra-Boyd National Park, part of the Greater Blue Mountains World Heritage Area, lies around 180 kilometres west of Sydney, Australia, and is a renowned rugged, scenic wilderness area.

environmental educators and ecopsychologists with experience in human-nature connectedness (Cornell, 1979; Fisher, 2002; Kidner, 2001; Plotkin, 2003; Sewall, 1999; Thomashow, 1995, 2002; Uhl, 2004) and the work of Kabat-Zinn (2005), as well as my preference for intimate connecting with natural areas. While it has commonalities, indeed possibly outcomes consistent, with perceptual oriented learning approaches (Thomashow, 2002; Uhl, 2004), its use of mindful perception for heightening consciousness in natural areas differentiates it from most learning approaches which have the primary focus on eco-literacy or environmental awareness. The MAPIN exercise was developed with consciousness transformation as its primary goal, rather than extending environmental awareness, although this was one of the resulting benefits.

The development of the MAPIN recognizes three ways for developing experiential knowledge: 1) sensory observation, 2) rational and affective interpretation, and 3) imaginal engagement (meditation, contemplation, and self-reflection). Bringing together these three broad approaches into a single exercise can be considered an integrated form of scientific inquiry that can provide a type of empirical knowledge or understanding about highly subjective phenomena. The MAPIN exercise is a specific method or practice for developing experiential knowledge based on an underlying methodology (interpretive phenomenology) in which direct, mindful observation of internal and external events is recorded using technical and narrative, rich language on worksheets and analysed to extract key thematic descriptions of an intensely personal experience. The final step in making valid this method is to share with others so that it can be discussed and confirmed, or disconfirmed. From this perspective, this article can be viewed as an act of public disclosure of experiences and insights I have “empirically” collated using the integrated approach described, during the project that is the subject of this article.

The MAPIN exercise is based on two premises. First, that the quality of perception affects the quality of environmental awareness and the state of one’s consciousness. Normal waking consciousness is significantly influenced by perceptions of our inner and outer environments (deQuincey, 2002, 2005; Rodaway, 1994). A direct perceptual contact with the world lies at the heart of consciousness, contact that includes perceptual (direct sensory input) and non-perceptual (indirect knowing) awareness of our world (Natsoulas, 1999). Secondly, our perceptions are influenced by immediate cognitive and emotional responses to stimuli, and our social and cultural background. We tend to impose concepts, labels and judgments on everything that is perceived, and therefore all sensory objects and events are seen through the filters of self-centered thought and prior conditioning. This risks an incomplete, superficial picture of reality

(Brown, Ryan, & Creswell, 2007), including a lack of awareness of our immediate sensory environment. How can we engage and come to understand and connect with our environment, inner or outer environments, when we are so mindless or lost in our habitual, abstracting and imagining mental and affective states? We cannot. We need to reclaim our capacity for “higher” awareness and live more fully in the sensorial, present experience of our ever-shifting reality. Dealing with our wandering, judgmental thinking, our tendency for mindlessness, requires that we not just improve our perceptual awareness but that we improve the quality of our attention. One way to improve perception is to facilitate mindful awareness as a way of minimizing detachment, bias, and judgmental categorizations, as well as a way of observing the stream of thoughts, emotions and feelings we experience in perceiving our personal and social “reality.”

Mindfulness is fundamentally a quality of consciousness. It is a receptive attention to and awareness of present events and experience (Brown et al., 2007) that allows the practitioner to be fully aware of each moment, self-regulate attention on the immediate experience, be open to whatever it has to offer, be connected with the senses, confronting situations with an attitude of acceptance, and free of the domination of habitual cognitive routines (Bishop, 2004; Holland, 2004; Teasdale, 1999). Mindfulness concerns a clear awareness simultaneously of one’s inner world such as thoughts, emotions, and sensations, perceptions of things, and events in one’s outer surrounds, as they exist at any given moment. Mindfulness arises by increasing the quality of awareness to the present moment:

We live first and foremost in an extended present, which is the primary reality. And the quality of that present should be our greatest concern. (Berleant, 1992)

The quality of our experience will be determined by our intention (purpose behind being mindful), attention (the stability and durability of one’s attention) and attitude, such as openness, curiosity, and appreciative or loving mind. The experience of mindful perception that defines the MAPIN exercise is largely wrapped up in integrating these three approaches of mindfulness within a direct, experiential encounter with nonhuman other.

The MAPIN sessions

The MAPIN exercises were undertaken by the author in a range of natural settings within Sydney, Australia, and “wilderness” mountainous areas north and south of Sydney. MAPIN worksheets were designed to record the session such as the biophysical characteristics,

observations, reflections, and responses. A total of 33 sessions were conducted between 2007 and 2008 over an 18 month period. Each session lasted between one and two hours depending on the psychological intensity, biophysical characteristics, and environmental context of the places visited. Each session incorporated the following activities in the following sequence:

1. Place familiarization: description of a place's ecological characteristics such as vegetation communities, common species, habitat variety and quality, signs of fauna, landscape type, geological features, and drainage patterns and features.
2. Meditation: a 10–20 minute breathing focused meditation to calm the mind and heart, become centred and focused on being present. A 7 count breathing rhythm can be used to direct awareness within and maintain a detached observational stance towards any inner and outer events. This breathing rhythm should be maintained for each of the following activities.
3. Sound mapping: maintaining an upright posture if sitting or a balanced standing stance, scan the surrounding environs with both active and passive listening and record on a sheet of paper each sound over a period of around ten minutes in the soundscape, mapping its source, direction, and distance.
4. Mindful listening: select one sound or encompass the entire soundscape and reach out to that source with an attitude of care, respect, and curiosity. Carefully listen to the sound, note everything about it (tone, volume, pitch, melody, rhythm, character) and describe any emotions, feelings, memories, images, and thoughts that arise. The focus is on mindfully connecting with the sound source and allowing it into your inner space.
5. Mindful vision: similar to the previous activity, use your scanning vision to identify any potential objects of interest and then focus on one of these and get close and gaze across and into this object/subject. Record its physical appearance first and then as you dwell empathically upon its particular features and relationship to its surrounds, observe without attachment any inner responses.
6. Mindful touch: select an object of interest and carefully and caringly touch/hold/stroke/caress it. How does it touch you in the different ways that you touch it? Touching can be seen as a reciprocal action, one touches as much as one is touched by the encounter. Record all sensations, memories, affectations, and imaginings during the tactile engagement.
7. Connecting activity: the aim of this activity is to empathically engage a particular object or landscape feature, either using one or more senses. Allow a sense of deep appreciation and/or

love for the subject to arise naturally while maintaining an extended breathing rhythm. Engage in an imaginary dialogue with the landscape or nature being. Hug and touch it if possible, or visualize an interaction that may elicit a connecting, sharing experience. This activity cannot be rushed and will normally take around 20–40 minutes to complete, depending on one's capacity to maintain a mindful connection. Be receptive and open to any emotions, thoughts, insights that may arise. Record all inner events without becoming attached to any one. Be patient, open, and observant to the experience; it is often subtle yet profound.

Mindfulness was applied to the senses of vision, hearing, and touch, as well as to the imaginal connecting activity. My decision not to use smell and taste was, apart from my low sensitivity to organic smells, based on the presumption that the smells in natural areas I visited would not be as diverse and informative as my three dominant senses. Taste was inappropriate for most objects in natural settings without knowing what was palatable. In some circumstances, I did record smells and tastes, but the infrequency of these excluded any analysis.

Analysis

Worksheets were analyzed through an inductive approach to identify key descriptors and emergent themes. The thematic data analysis software program, QSR N6, was used to categorize and organize data. Each statement, phrase, or key word within these categories was further reflected upon and interpreted to determine the key meaningful experiences of heightened states of eco-consciousness.

Results

As a result of the thematic analysis, 16 significant thematic categories were identified from my experience connecting with nature and heightened eco-consciousness:

1. Sense of reverence: experienced during deeper states of connectedness or eco-consciousness. Reverence was associated with an intuitive honoring of the sacredness of nonhuman other.
2. Humility: feeling of humility when perceiving and reflecting upon nonhuman nature's creativity, immensity (spatial and temporal), and intelligence.
3. Connectedness: with nonhuman other and underlying spiritual reality. More intense experiences of relating or connecting catalyzed a shift from a sense of a self-as-separated to a self-in-kinship (eco-self).

4. Ecological awareness: direct observations of ecological processes and communities enhanced understanding, appreciation of a place's ecological characteristics.
5. Being/being: was one of the more significant insights associated with heightened states. Three meanings of the term "being/Being" were interpreted: (a) being, as an embodied individual such as a human being or tree, (b) being, as a way of minimal "doing," and (c) Being, representing the core, enduring essence (soul/witness/eco-self) of being.
6. Sense of place: represents an affective oriented affinity with a specific place or a space within a setting through an immediate sense of connectedness or through frequent visitations building empathic familiarity or dwelling.
7. Ecological sense of self/self: refers to an expanded sense of self (the sense of "I" or ego) in which there is maintenance of self-integrity through recognition of self-other boundaries yet resonating and identifying strongly with nonhuman other. An expanded sense of self led to a sense of unity or kinship with a setting and/or aspects of it. Eco-self refers to an experience of transpersonal oneness during psychologically immersive and meditational states with some deeper aspect of Being, which may be referred to as one's soul or Self/Witness, but not a loss of a sense of one's subjective experience of "I."
8. Restorative/therapeutic experiences: represents states of psychological well-being during and following each session as a result of reinvigoration, connectedness, meaning-making, calmness, and a sense of inner balance or centeredness. Restoration helped in letting go of negative states of mind, for example, anger, sadness, and anxiety as well as reducing physical and psychological stress. The experience of restoration could either evoke heightened states or arise out of a heightened state.
9. Spiritual meaning: a nature-based spirituality, a sense of the ineffable underlying interconnectedness, unity, and sentience within nature, arose in nearly every session. This awareness strengthened and persisted with deeper heightened states, resulting in a sense of existential calmness, eco-self, and love or being loved.
10. Personal insignificance and vulnerability: arose consistently during sessions in the Barrington Tops wilderness area. Examples of wariness and vulnerability include when camping alone in the wilderness in an electrical storm, almost losing my footing when buffeted by strong winds near a cliff-top edge, nearly stepping on a poisonous Eastern Brown Snake in a wilderness area, and observing recent signs of wild dogs.

Personal insignificance was associated with reflections on contrasting my spatial and temporal characteristics with the immensity of landscapes and immense ages of geological features and life spans of trees. These situations or feelings reminded me of my mortality and insignificance within the vast intricate web of life.

11. Sense of wildness: I viewed wildness as a quality of being wild, a being or place that I perceived as being undomesticated, self-autonomous despite any influence by human activities. It was strongly associated but certainly not restricted to designated wilderness areas.
12. Appreciation of nonhuman otherness: arose from a relief to be away from people and suburbia and a deep appreciation of the settings nonhuman beings' otherness, their differences from human form, their adaptability, the diversity of forms and relationships, and interdependence.
13. Oneness/communion: was experienced briefly toward the end of many engagements characterized by a sense of timelessness, total awareness of living in each moment, a shift to an inclusive, serene consciousness, and a sustained experience of unity with another being. Communion within the wilds of the mountains and other places did not always occur. They indicated highly meaningful experiences within deeper states of heightened eco-consciousness.
14. Perceptual acuity: the quality of perceptual attention was found to influence the quality of the experience, and therefore the meanings I took away from the session. Simply, heightened eco-consciousness was associated with heightened perception.
15. Solitude: Being alone provided a more singular, intense psychological exposure and capacity to attend to the environment simply because I was not distracted by interpersonal dynamics. Evernden (1992) writes that many environmental writers only realized the significance of nonhuman nature when in solitude. It is, he argues, only when there is an "absence of the demands for social consensus can the uninterpreted other be encountered and the emergent self escape constraint" (p113).
16. Mindfulness: was a critical mode of consciousness in evoking deeper awareness of inner and outer worlds and eliciting heightened states. It facilitated the ability to shift between different modes of mental functioning—from a more esthetic, analytical "doing" mode to a more internally aware and empowered "being" mode with its focus on encouraging a fuller experience of the present (Segal et al., 2002). Being consistently present in each exercise and engaging a place with mind and heart opened up the inner space to allow meaningful

experiences of connection to arise, from which flowed, for varying periods, various forms of heightened eco-consciousness.

Most of the sixteen themes associated with my experiences of connecting with natural areas occurred at some point during each session. Several themes, reverence, eco-Self, and spiritual meaning, tended to be associated with deeper states of eco-consciousness with its more intense feelings of connectedness with self, nonhuman other and/or spiritual dimensions. The latter three themes, perceptual acuity, solitude, and mindfulness, were critical causative processes as well as experiential qualities of heightened eco-consciousness. Heightened eco-consciousness was experienced as an altered state of consciousness that usually arose gradually during each session. Consciousness states appeared to shift from normal waking consciousness at the beginning of each session through to varying levels of psycho-spiritual experiences of connectedness, what I labelled heightened eco-consciousness.

Normal waking consciousness, the type of consciousness associated with daily routines, thinking and doing, shifted to an environmental consciousness during the first two activities of place familiarization and sound mapping activities. These more cognitive activities helped to focus attention on the environment to be engaged, leading to a familiarity with the biophysical and aesthetic qualities of the place. The associated environmental consciousness is a state that I associate with most outdoor activities, such as hiking, environmental education, and nature appreciation activities. This type of consciousness is characterised by a perceptual focus on the surface of things and a mindless or unreflective awareness dominated by a superficial and/or utilitarian orientation towards one's natural surrounds. It evokes a range of mental and physical well-being outcomes including calm, peace of mind, enjoyment, appreciation of nature, and environmental understanding.

One of the three forms of eco-consciousness would then develop: initial, eco-self, and eco-Self (Table 1). Their evocation appeared related to the consistency of mindfulness and the psychological and biophysical contexts of the sessions.

Discussion

Heightened eco-consciousness (HEC) was experienced as a positive, relational state of consciousness that differed from environmental consciousness by the experience of psycho-spiritual connectedness with nature and/or place, an expanded sense of self, and an awareness of deeper aspects of one's being (soul/Witness/higher Self). The primary approaches to developing heightened states of eco-consciousness were 1) perceptual clarity, 2) intentional and

consistent attitude of care, respect, and freshness, 3) solitary reflectivity, and 4) mindfulness. A spectrum of consciousness states were identified as characterising the experience of inner change of connectedness: normal waking – environmental – initial HEC – eco-self HEC – eco-Self HEC (see Table). While the eco-self state was experienced in most sessions, on some occasions due to the barriers discussed below, an environmental consciousness with moments of initial heightened states was experienced. Many sessions however went beyond the eco-self states to the eco-Self orientation, the deepest state of eco-consciousness in which there was a more sustained sense of expanded self to some core, ego-less form, a sense of oneness with life and nature, and a sustained, strong sense of the sacred, divine, meaningful nature of life.

Mindfulness was the critical approach to evoking the various experiences of connection and forms of heightened eco-consciousness. Mindfulness provided the “tool” and process for not remaining mindlessly consumed by my aesthetic, rational and/or affective responses, as would normally be the case in most nature engagements where normal waking and environmental consciousness states predominate. Of all the activities, mindful listening was generally the catalyst for moving beyond environmental consciousness that arose during place familiarization and sound mapping, particularly when responding to more fluid, consistent sound sources such as waterfalls, rapids, wind in the canopy and cicada droning. Applying mindfulness to listening, after the more exploratory sound mapping activity, brought conscious attention to bear on inner states evoked from listening, and away from the abstractive process of labelling and mapping sounds. Later activities tended to consolidate or even deepen the heightened eco-consciousness state.

Based on session reflections described in worksheets, a number of barriers to evoking heightened states, or deepening eco-consciousness, were identified including the persistence of low energy states (lethargy, tiredness), persistent negative emotions originating prior to the sessions, not sustaining mindfulness throughout the session, being distracted by nearby human activities, and becoming distracted at key times, especially the more intense connecting activity, due to hunger, discomfort, and proximity of venomous snakes. Being prepared for and appropriately coping with such distractions is part of the discipline and practice of this exercise. Avoiding or removing the source of discomfort and danger is one obvious approach, so is controlling where attention is residing and the intensity and durability of the affective responses during these distracting events. Finally, the primary challenge I discovered in undertaking this trial was to bring awareness to bear on shifting states of consciousness, to be aware of being aware as well as the nature of my state of

Table 1. Spectrum of Consciousness States Experienced During the MAPIN Exercise

STATE OF CONSCIOUSNESS	CHARACTERISTICS
Normal waking consciousness	Externally oriented, reactive, and planning cognitive state of consciousness often dominated by mind chatter, expectations, fantasizing, being judgmental, mindlessness, and/or surface perceptual engagement. Emotional/psychological states associated with day-to-day outward focused life (doing mode of awareness). Associated exclusively with ego/personality sense of self and associated socio-cultural roles & responsibilities. Experience of natural surrounds dominated by aesthetics, recreational functionality, and/or background for socializing.
Environmental consciousness	Consistently respectful awareness of one's natural environment. Normal state of consciousness but focused on the ecological, sensorial, and/or cognitive appreciation/learning experience. A sense of appreciation for and curiosity for experiencing the surrounding natural environment. Contained sense of self (me/other dualism predominates). Cognitive-oriented engagement with nature and environmental issues.
Initial heightened eco-consciousness	Stepping beyond, but retaining, the cognitive- and affective-oriented environmental awareness and aesthetic enjoyment of the place to a deeper salience and appreciation of its unique essence/energy, sense of place. A sense of respect for the intelligence and ecocentric value of all life. A sense of one's being. An enjoyment of dwelling in place. Mindful perception of the richness of sensorial experience. Consistent inner calmness, preference for contemplation, and self-reflectivity. Mortality salience present but without fear or anxiety. Relational connection to a place's features/energies and/or beings leading to a tangible connected state of consciousness and less self-oriented sense of self. Recognition of innate intelligence and underlying spiritual basis for life.
Heightened eco-consciousness (eco-self orientation)	Stronger sense of connectedness, love, and identification with nonhuman others, recognition and appreciation for nature's interconnectedness and ecological diversity/richness and spiritual basis. Consistent mindfulness of perception and situated being. Expanded sense of self to include surrounds, possibly beyond to nature/cosmos.
Heightened eco-consciousness (eco-self orientation)	Characterized by the previous state but stronger sense of spiritual connection with Being/Self/Soul. Sense of communion with surrounds/beings. Reverence for life and empathic disposition toward all beings. Persistent experience of love (and being loved by nature/All that is, God). Sense of grace and humility. Joie de vivre from experience of loving connection. Expanded sense of self to include nature and/or Self (higher self/witness/soul). Experience and/or tangible knowing of a no-self state (nondualistic sense about life).

consciousness at any one moment. The transient nature of consciousness states and the need to detachedly or mindfully observe one's own changing states of consciousness, while often having profound affective responses in connecting with nonhuman nature, is a challenge that takes practice to develop.

The MAPIN exercise, in consistently evoking heightened states of eco-consciousness within the author, offers a potential approach to deepening connections with nonhuman nature. As stated at the beginning of this article, it requires assessment involving participants

from a broad spectrum of socio-demographic backgrounds to confirm this potential. Some of the benefits of HEC experienced by the author during the conduct of this pilot study included:

- Experiencing profound inner calm and peace of mind;
- Expanded sense of self;
- Consolidating eco-centric values;
- Greater sense of life meaning;
- Reduced mortality salience and fear;

- Enhanced quality of self-reflection;
- Reduced stress, anxiety, anger, and other negative states experienced prior to the session;
- Sense of increased mental well-being that lasted well after the “intervention” or session.

This potential of heightened eco-consciousness is consistent with research indicating the importance of direct experience and meaning-making for gaining and maintaining a sense of control over one's life (Shapiro, Schwartz, & Astin, 1996), as well as evoking a sense of personal completeness and well-being (Maiteny, 2002). While heightened eco-consciousness using the MAPIN exercise needs to be explored, indeed substantiated, from a group and/or organizational perspective, I believe that it holds potential for evoking therapeutic, empowering, and meaningful experiences and understandings for others about human-nature relationships that may contribute towards individual and collective psychological well-being and shifts in consciousness.

Conclusion

This article has reported on a phenomenological self-study into a specific approach to enhancing human-nature connectedness with the intent of evoking heightened eco-consciousness. The author's trialing of the MAPIN exercise described in this article facilitated increased connectedness to nature, ecological awareness, perceptual acuity, shifts in consciousness and sense of self, as well as spiritual experiences with nature. It furthers the ecopsychological “project” by offering not just a consciousness-raising process but the possibility, following further research using groups of participants, of a learning/therapeutic tool for environmental educators, psychotherapists, ecopsychologists, and other professionals interested in the psychological dimensions behind human-nature connectedness. Despite the limited transferability of the results of the self-study, the MAPIN exercise offers an experiential, contemplative, and affective learning tool that may offer other individuals, especially those concerned about the state of the world, ways of enhancing their experience of nature connectedness and catalyze shifts in consciousness with all the transformative and therapeutic benefits (and challenges) that this offers.

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