

Evolutionary ecopsychology

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Abstract

It is argued that ecopsychology – as it moves into the arena of necessary ideas and practices, with humanity facing challenging, even dire, times ahead – needs to be grounded on tested and encompassing paradigms such as evolutionary biology. In this sense, ecopsychology can be seen as an application of, specifically, evolutionary psychology. A call is made for testable constructs that can move ecopsychology forward to become a significant, interdisciplinary contributing field – its integration into the natural sciences.

Keywords: evolutionary psychology

Introduction

...roughly, 250 generations of civilized society lie atop 300,000 generations during which we have been hunter-gatherers living in small social groups. And selection would have had many eons to adapt us to such lifestyle. Evolutionary psychologists call the physical and social environment to which we have adapted during this long period the “Environment of Evolutionary Adaptedness,” or EEA. (Coyne, 2009: 227).

The opening quote by Coyne (2009) illustrates, in my opinion, what psychologists (and all social scientists) must address as brute facts¹: the reality of having to embrace the ever-expanding evidence that a long existence as a very specific type of animal, and the consequences of this long existence and evolved adaptations, express themselves in psychological processes, responses, and social proclivities.

To make matters even more confusing, psychology, as a social science, has been distracted by a perverse adoration of human culture and society, anthropocentrically so, while disregarding for the most part the now conclusive edicts of evolutionary science (Barkow, Cosmides, & Tooby, 1992; Crawford & Krebs, 2008). That is, by conveniently ignoring the role that (for example) natural

¹ Spanish-American George Santayana’s phrase to describe the invariants of the universe.

selection might play in social constructs, their approaches have tended to a circular *transductive* loop, moving from one extant social construct to the next without grounding most of these on a, at least, 1.8 million-year odyssey of flesh, blood, bones, and minds co-evolving with the natural world.

In my mind, the above emphasis qualifies (but does not delimit) 'ecopsychology' as an application of Evolutionary Psychology and Evolutionary Biology. Specifically, this emphasis makes use of Evolutionary Psychology's (Barkow, Cosmides & Tooby, 1992) insights as part of a general habit (perspective) of asking basic questions about mental health, most likely adaptations, and their implications to 'eco-therapy'.

Specifically, Cosmides, Tooby and Barkow (1992) propose the study of scientifically testable, domain-specific adaptations that could have emerged during the last 1.8 million years. Because natural selection works slowly – certainly for most of the integrated circuitry that orchestrate multi-modal psychological proclivities and behaviors – it is more likely that our mind/body systems continue an “existential expectation” (a genome momentum) that those particular behaviors, social organizations, and environments are still in place: small family units covering great distances in open savannahs, greater physical output during hunter-forager-scavenger daily activities, greater psychological and physical endurance, and the almost complete control of manufacturing “culture” with our very own primate hands (to mention just one generalized description). In their words:

Natural selection can generate complex designs that are functionally organized – organized so that they can solve an adaptive problem – because the criterion for the selection of each design feature is functional: A design feature will spread only if it solves an adaptive problem better than existing alternatives. Over time, this causal feedback process can create designs that solve adaptive problems well – designs that “fit” the environment in which the species evolved (1992: 9).

In this light, it becomes a central question for “eco-therapists” as well to ascertain whether some modern-day “dysfunctions” originate in *severe and culturally-arbitrary divergences from ancestral adaptations*. To the extent that we could agree that “nature estrangement and/or alienation” (Conesa-Sevilla, 2006), and its complex and multi-varied manifestations, is confounded with medical and psychological problems, then we have an “ecopsychology”. For any psychologist, these adaptations (challenges/problems and solutions) run the gamut from the

“evolution of psychodynamic mechanisms” (Nesse & Lloyd, 1992), “cognitive adaptations for social exchange” (Cosmides & Tooby, 1992), to “pregnancy sickness as adaptation” (Profet, 1992).

My limited sense at this historical juncture is that the future of ecopsychology will have to integrate these and more perspectives if it aims to extend its now more psychological, transpersonal and clinical (personal growth, therapy, counseling) foci to include a vast field of integrative and developing ideas, while engaging in potentially profitable interdisciplinary useful collaborations. The very term “eco” implies interdisciplinarity. This emphasis fashions a natural scientific approach to ecopsychology: an evolutionary ecopsychology.

Evolutionary ecopsychology

As a way of a very modest evolutionary ecopsychology manifesto, we can state the following: When humanity invents (speaks) itself extemporaneously outside “nature’s text,” it has not, on a fundamental level, escaped nature, for it is and always will be a product of nature. However diversely culture can be twisted by an inventive ape, if this culture is extant from “nature,” it is doomed to fail; cannot provide him with the physical and cognitive resources that would make him “happy” or, in other words, fully integrated in the circle of life.

My own phrase “evolutionary ecopsychology” might, in the minds of most ecopsychologists, conjure up the foundational work of Paul Shepard, and specifically his seminal book *Nature and Madness* (1982/1998), which I consider to be the original evolutionary (and developmental) ecopsychology manifesto. This paper is simply a more modest continuation and reiteration of his insights. As some of the readers may know, before there were any ecopsychologists around, Shepard used the word “subversive” to characterize the effects of what the science of ecology would have in radicalizing societies and minds (Shepard & McKinley, 1969). *The subversive science: Essays toward an ecology of man* (1969) introduces some of the arguments and themes that would later find a more expanded form in his later work.

Evolutionary ecopsychology does not do away with transpersonal ecopsychological approaches but rather allows for a more complete discourse participation, an enlarging of the scope of what ecopsychology could be about. In this sense, even though I agree with Ralph Metzner’s (1999) idea of a “green

psychology” – a radicalized, mainstream- and (ironically) nature-decontextualized psychology – my own perspective is that it is in *evolutionary* science that the most green can be sought and found.

Lacking this sensitivity and/or training, one of the great dangers I sense in privileging a “spiritual” (whatever that means) view of humanity (if that is what some ecopsychologists are doing) is the accompanying anthropocentric myopia that has been rationalized as a “manifest destiny” to place ourselves arbitrarily in some teleological enterprise or journey that makes our march through history (another invention and myopia) a more significant myth (Nash, 1982). Ultimately, how we come to acquire a “significance” of self-place is, after all, a semiotically interior process whether it excludes small self from grand Nature or connects big Self to the rest of our biosphere. Perhaps we should start here.

Certainly, some myths are more “natural” (ecologically valid) than others, as even myopic history² shows. Certainly, the human mind has mythic-cognitive proclivities (Campbell, 1988). In classical psychology, these mythical proclivities may be an aspect of an ideal super ego helping us conceive of a grander and better self. A few, however, are rationalizations of supremacy; reiterations of a divine entitlement to produce the most distorted forms of social organization and psychologies, resulting in environmental and ecological mayhem. Even in seemingly more benign “New Age” approaches, the new rationalizations aim to replace the dominant religious ideology with monstrous hybridized forms that speak of a greater ecopsychological need, but fail to address it, or that satisfy it with an easy “spirituality”, more *Xanax*³-like than fundamentally useful.

If a respect and sensitivity exists for the knowledge that 300,000 or more generations of humans were doing very specific things (biology) that gave rise to a specific homo configuration of flesh, blood, bones, and minds, then many other scientific questions have to follow from this base. That is, even the phenomenon of *transpersonalization* (with its multifold varieties and implications) falls under the study of evolutionary ecopsychology and asks “simple”, functionalist questions: Is there survival value in having the cognitive capacity to put oneself outside of ego by any number of methods and practices? Is transcending ego boundaries adaptive?

² “Myopic” if we neglect to include the longer period of pre-history (roughly 1.8 million years) when our human ancestors evolved our unique and shared homo and hominid characteristics respectively.

³ Tradename of a benzodiazepine class drug, often used to treat anxiety disorders and panic attacks.

Is transcending ego boundaries a sort of built-in mental hygiene, a sub-routine prescription for coping with the harsh existential realities of human existence? Why are humans morbidly and dangerously religious and/or spiritual?

These questions and more are in the domain of evolutionary ecopsychology (and of evolutionary psychology as well). In the next section, I will summarize with a wide brush the noble, courageous, and foundationally useful journey that ecopsychology undertook as one answer to the deep emotional distraught that gained prominence and maximum intensity in the 1960s and 1970s; a realization and insight of a shared and collective sense of greenness.

Ecopsychology: The first phase

While looking for common ground, I will venture a guess that most readers of the words that follow – a poem by Walt Whitman (1880), *The Dalliance of the Eagles* – would recognize it as a literary example of what I believe many ecopsychologists would classify as “nature-identification” or as a moment when a human “connected with nature”:

Skirting the river road...
 Skyward, in air, a sudden muffled sound – the dalliance of the eagles,
 The rushing amorous contact high in space together,
 The clinching, interlocking claws – a living, fierce, gyrating wheel,
 Four beating wings – two beaks – A swirling mass, tight grappling...

In this sense, ecopsychological insights are well represented in the history of ideas – in literature for sure. Whenever humans have felt a generalized or even specific 'connection' to or 'disconnection' from nature, and could translate these sentiments into an artistic form, they have done so. To the extent that there exists a significant canon of literature that addresses these sentiments, 'ecopsychology' is nothing new. Whitman, like Thoreau (1862), was an avid walker and an observer of nature⁴. More to the point, Whitman lived and wrote as if “nature mattered” (Devall & Sessions, 1985). His poem does not mention 'nature', 'connection' or 'ecopsychology' but, nevertheless, it implies all these. Therefore, much of what 'ecopsychology' is about has been tangentially defined – but it should not be. Neither should we discount the real urgency of understanding the psychologies of

⁴ Pertinent to the mis-significations addressed in this article, Whitman misidentified the eagles as male and female, not realizing that they were two males locked in aerial combat.

an ape that has produced so much environmental and ecological mayhem – equally a challenge for ecopsychologists.

What is 'ecopsychology' ?

To the extent that the morpheme text 'ecopsychology' is conjoined, it suggests that two scientific enterprises, ecology and psychology, are partnering toward an emergence: a third interdisciplinary area from which to advance theories and hypotheses, and test them with known scientific methodology. For starters, there is an assumption that psychology is a scientific endeavor. Most textbooks of General Psychology define psychology, to paraphrase, as: The scientific study of 'mind' and behavior (mental and behavioral processes) both in individuals and in groups. Within psychology, however, there are differences of opinion about what constitutes valid psychology which have caused rifts and divisions.

Ecology is described by the British Ecological Society as:

...the scientific study of the distribution, abundance and dynamics of organisms, their interactions with other organisms and with their physical environment (B.E.S., 2009)

A reader or client seeking 'ecopsychological services' would assume that an ecopsychologist is trained or well-versed in a scientific study of systems in order to satisfy the 'eco' prefix related to their nascent profession and area of expertise. More importantly, viewing humans as animals, as another species, would mean that claims, concepts, theories advanced within ecopsychology should not diverge very far from robust (well tested) paradigms, such as evolutionary science, and would have a lot to say about the original and psychologically relevant contexts from which hominids emerged. It could be argued that the combined areas of evolutionary psychology, human ecology, and environmental psychology are already contributing a great deal to our 'ecopsychological' understanding (if defined in scientific terms).

On the other hand – out of historical necessity and need for affiliation perhaps – the first phase of ecopsychology has been mostly a humanistic, hard to test construction of 'relations' or 'connections' to the 'natural world'. When it comes to phrases that could become verifiable constructs, such as 'nature connection', or “Nature Deficit Disorder” (Louv, 2005) we enter the land of the conveniently fuzzy. This characterization may seem harsh coming from an ecopsychology

sympathizer. However, given this lack of scientific rigor, it seems that ecopsychologists are mostly content with becoming another mystical enterprise within psychology where evidence-based approaches are rarely, if at all, pursued. When pursued, they are seldom if at all grounded in evolutionary theory (with the notable exception of the works of Paul Shepard).

To boot, other than a few maxims cloaked in the language of psychoanalysis (Roszak, 1991/2001), there are no credible theories (falsifiable) that direct the work of ecopsychologists. Once again, let me reiterate that in a bigger tent of ecopsychology, all approaches should, ideally, contribute to a noetic convergence that makes our collective case an almost irrefutable paradigm. As alluded to before, there are significant and few exceptions, namely, Paul Shepard's human ecological proposals which contain verifiable or testable historical, evolutionary, and psychological insights (Shepard, 1982/1998). It is queer that few ecopsychologists I read do more than pay lip service to Shepard's contributions. More often than not, I get the sense that they are unaccepting of the strong evolutionary (scientific) message implied or present in his work. This may be an unfair characterization of their text, but it needs to be mentioned when it is blatantly absent.

In the sections that follow, I address several problems associated with lacking testable constructs, without which ecopsychology could become (or is) merely another passing, New Age denial-therapy for yuppies and boomers. I have raised similar issues in other work (Conesa-Sevilla, 2006; 2010).

Nature connection

The theoretical and therapeutical languages of ecopsychology often lead to an inquiry of what is meant by (and a clearing of obstacles that impede) 'connecting to nature'. The assumption is that a therapist can facilitate a process by which her/his client can create, strengthen, or rescue such a connection. The difficulty of using this terminology is that no ecopsychologist has put forth a credible (i.e., widely accepted and testable) operational definition of what 'connecting with nature' is. Alone, the operative words 'connection' and 'nature' are/have been difficult to define. What is 'connecting'? Is 'connecting' a specific and measurable feeling or emotion, an abstract or intellectual experience, a vague but certain 'spiritual' experience? Is 'connecting' something that varies greatly from individual to

individual? That is, for a hunter, 'connecting' might mean the semiotic coda tracking-stalking-chasing-killing-butchering (skinning and dismembering)-carrying-sharing a kill. For a gardener in Manhattan, it could mean taking care of a few plants and a cat. Imagine any conceivable and actual way of 'connecting' to something the individual decides to identify and define (subjectively) as 'nature', and it is clear that an operational definition, hopefully based on credible ecological science, is sorely needed. Imagine further that different ecopsychologists have different ideas of what "connecting to nature" could mean, from wearing cardboard masks and pretending to be a non-human animal to kayaking to an island. In this range of possibilities it may be true that whatever works, whatever activity does the trick of transforming a 'disconnected' client into a 'connected' one can pass for a 'cure' – hindsight therapy.

Apropos, there is no standard measure (widely accepted and tested-normalized) to be used that could give us a baseline dysfunction or dys-affectation, a symptomology, of what qualifies as 'disconnected from nature'. For example, it may be true that any person who chooses to live in a suburb or a big city is automatically 'disconnected', by definition, in some sense of that word. It may also be true that a natural Yanomamo, forced to relocate to downtown Chicago, will be 'disconnected'. Equally (?), losing a pet, a plant dying, not being able to listen to the waves by an ocean or sea could potentially lead to cases of 'disconnection'. But, how are we testing it? What are we testing? Are there degrees of differentiation between the states of 'disconnection'?

The converse: a trip to sunny Mexico in the middle of a harsh Wisconsin winter could also qualify as 'therapy'. So why do I need ecopsychology or an ecopsychologist?

The symptomology of 'disconnection' may very well include measurable psychological and medical states such as depression, anxiety, fatigue, and an enduring sense of alienation (or estrangement). On the other hand, made-up disorders (e.g., Nature Deficit Disorder) are vague and untested. It is usually easier to define something in the negative. But 'connecting' and 'connection to nature' are altogether different matters. The positive definition of either, toward a testable psychological construct, must be complete, replete with testable options to insure that scientific or medical protocols are followed. Short of this, what we have is a pseudo-science – more pseudo-psychology.

Whose “nature” anyway?

The term 'nature' is even more problematic to define. Is nature a garden (Pollan, 1991), the 'wild', a farm, a river, the sea, my dog barking, a bird singing? Does the term 'nature' imply interactivity (walking, running, swimming, hunting, etc.)? That biosemiotician Kalevi Kull (1998) distinguishes between four types of nature is an indicator of the challenges that serious scholars and scientists encounter in defining 'nature'. Given Kull's definition, what type of nature is to be found in an ultra-manicured Japanese garden? Is this landscape merely alluding to nature? The Japanese garden seems to be a lie⁵: natural 'nature' is never that peaceful, under human obsessive control, a one-dimensional focal space for tranquility and meditation, where lions and scorpions never shall intrude. On the other hand, at a cognitive and basic level the natural world – all survivable *umwelten* – seems to afford us consistent and predictable existential tags that can be recognized and used by most organisms (Conesa-Sevilla, 2001).

Additionally, nature is neither masculine nor feminine, wrathful/vengeful nor loving/merciful, black nor white, past nor present, sea and/or mountain, or 'out to get you'. From an evolutionary ecopsychology perspective at least, nature has no motives, no intentions, no plans, because nature as a single-minded entity does not exist (never has). According to the best scientific evidence, nature seems to be a collection and interaction of complex energy exchanges: embodied; cyclical, continuing and ceasing; extremely diverse; expanding and contracting, or appearing and disappearing, to the whims of none. In short, there is no 'nature', only natural processes and living systems. Humans are aware of them or they are not; they are fully embedded or only-to-a-degree-involved in them, or they are not. As psychologists we must acknowledge that in all the above dichotomies 'nature' is a projection: both or either (male-female, negative-positive, good-evil, hard-soft) depending on custom or on personal psychological necessity. Both valences or sides are potentially useful for personal transformation.

In short, the degree and quality of these personal 'immersions', while taking into account individual differences, cultural practices, and evolutionarily real scenarios, could account for a vast array of accommodations, interpretations, and responses to the dynamics of nature. Ecopsychology, without evolutionary science, human ecology, or environmental psychology, is at a loss to describe these complex and

⁵ All gardens are “pathological” in this sense.

multivariate interactions. Facile and simplistic notions of what it is that some humans do when 'connecting to nature' define, thus far, the enterprise of ecopsychology.

A different but important question: Is an ecopsychologist who lives and works in a city and only seldom partakes of raw nature still an ecopsychologist? In other words, is s/he credible, comparable to the physician who smokes, as a counselor of better habits? Does the same ecopsychologist who speaks of nature in the abstract, or even concretely, when recommending a trip to Baja, really understand nature?

It is likely that, like most people, the ecopsychologist runs ahead with words farther than understanding can go, labeling objects, acts and states supposing that they are correctly (inclusively) signifying the phrase 'connecting to nature'. Like most people, the ecopsychologist enters the habits of *linguaging*, copying others without due analysis and reflection on what these words could mean (Kull, 1998). In therapy this could be either annoyingly or disastrously vague.

Ecopsychology as mature emergence

In order to be helpful and to foster ideas that could end up as part of testable constructs, it may be better to make the distinction between diverse, natural environments or *natur umwelten* (from seaside, to desert, to mountain, to alpine meadow, etc.) and synthetic/artificial, built up (even solipsistically created) environs. The assumption here is that this continuum allows for testing specific hypotheses about what type of natural and synthetic environments and corresponding activities can be conducive to better mental and physical health (I make the assumption that many humans can, and apparently do, live happily in built-up environments. This fact should be as interesting to ecopsychologists as any other *biophilic* tendency that we could enumerate and test). Kaplan and Kaplan's work on the cognitive and affective reading of landscapes as complex, mysterious, legible, and/or coherent is useful in asking questions about innate cognitive capacities to resolve artificial versus natural complexity (Kaplan & Kaplan, 1982, 1989; Kaplan, 1987).

Key to the above continuum is the idea of accepting the lack of personal control, or how we live with/without the lack of control. It may be safe to suppose that humans assume that synthetic/artificial, built up environs are more controllable – perhaps another expression of a personal fable. Laws, peacekeepers, good

neighbors, water, food and electricity on demand, with an almost certainty that a citizen won't be mugged or killed, all could add up to a sense of control (albeit illusory and confabulated). Having too much control may also lead to boredom and to the 'pursuit of happiness': unhealthy pastimes that engender a vicious psychological circle where cyclical dissatisfaction and consumerism go hand in hand. To mention the work of the Kaplans' once more, the continuum for both artificial and natural environments runs a gamut from highly legible and coherent but low in mystery and complexity (to put it another way: boring), to being legible and coherent enough with enough mystery and complexity to keep us cognitively engaged.

Returning to the issue of control: we lack control in natural environs, or a sense of control is scaled down to the realization that our actions will never reach more than a sustainable balance where we are never masters of the universe. The farmer is reliant only on a fickle weather, in most cases, for her/his crops to come to harvest. On a hike, in a national park or by the beach, a person cannot control whatever forces are at play that create an ever-present sense of danger where caution is required. As an example, one presumes that a Yanomamo from the Amazonian rainforest could never really fully relax in a Venezuelan tropical forest and yet we may think of her/him as the most ecopsychologically embedded individual on this planet. One assumes further that the same Yanomamo can be equally unhappy and happy, angry and content, sick or well, high on Yopo or sleeping it off, young and old, and satisfied or dissatisfied.

These interactions are the purview of an anthropological and environmental ecopsychology if it dares to construct falsifiable theories and hypotheses. The question again is whether we should embark on this investigation employing scientific means, in a time of crisis, in order to expedite remedies. More succinctly, having a 'psychology' is like having a brain, a heart, or a 'mind'. The act of possessing them does not make one an expert on their functioning. Saying 'ecopsychology' and, more importantly, saying that ecopsychology is about this or that *only*, could oversimplify the vast ocean of meanings and sciences that could contribute to a situation where interlocking definitions are giving rise to a better and better understanding(s); to an emergence: first-order facts.

Words, no matter how often we use and repeat them, do not a real-reality make. That is why both non-verbal, insightful, and direct phenomenological experiences

and scientific constructions can resolve the confusing middle ground of familiar but meaningless (or, at least, not very useful) *language*. A mature emergence of ecopsychology in the field of significant ideas, and as a practical vehicle for effecting change in the lives of individuals and societies, necessitates a well-orchestrated, well-integrated, and inclusive compendium of methodologies and worthy, exploitable constructs.

Conclusion

The word 'ecopsychology' denotes that 'eco', as in ecology, stands for 'house', or 'house/home' as in our planet Earth. In taking this prefix to be a metaphor, the 'ecopsychologist' may wish to see beyond the more humanistic (i.e., human-centered, including the untestable assumption of the 'spiritual' or the metaphysical), signifying that this planet has been, for a long period, more than a 'house'. The ecologist (and the human ecologist as well) views this planet as host to systems of (is 'home' to) living creatures, including humans, without losing a sense of wonder and awe. If and when an ecopsychologist disregards the facts presented by reputable and uncontested scientific evidence and falls back on personal sentiments, hunches, and romanticized ideas of what this chunk of rock might be about, s/he ceases to be, in my opinion, an authentic green counselor. When the green counselor underestimates and obfuscates the full splendor of nature, its brutality and its gentler side, by contriving idiosyncratic ideas of what nature means to her/him, then her/his client is ill served. It is tantamount to sending a person to climb Mount Everest without fully explicating the rigors of mountain climbing – rocks falling, freezing temperatures, dropping oxygen levels: a strenuous physical endeavor. It is always easier to apply 'ecopsychology' to gardens and flowing rivers with gentle currents than to accept nature on its own, often brutal, terms. In this, we are always asked to accommodate to it, not the other way around.

The real task for a serious ecopsychology is indeed enormous. In fact, the task – the introduction and deconstruction of a narrative of place, geography, space, and psyche – is one that even the social sciences have yet to undertake in a credible way. According to Edward Soya (1989: 12): "...this reassertion of space in critical social theory is an exercise in both deconstruction and reconstitution. It cannot be accomplished simply by appending spatial highlights to inherited critical perspectives and sitting back to watch them glow with logical conviction". These

radical perspectives propel us to study human-nature interactions from an even grander scale, that of organism-nature meaning interactions. In the words of Winfried Nöth (1998), “This definition presupposes that the center of interest of an ecological semiotics is not a *homo semioticus*, but more generally, an *organismus semioticus*”, all organisms acting as interpreters in ever expanding and interacting circles of meaning.

Dabbling in and dallying about ecopsychology as a purely humanistic enterprise would be acceptable if the very word that describes its purpose did not carry such baggage already. In addition to misrepresenting itself, it sounds too much like ecology without containing or representing the rigor of this science. Ecology too has been on the defensive within biology to the extent that it conjures up the cancellation, with scientific validation, of the privileges to do with nature as we please. Finally, ecopsychology, as written about or presented, rarely describes its methods as ecological science.

Also confusing to readers is that the 'eco' part is connected to the 'psychology' part. To a reader already fatigued and testy with Oprah, *Cosmopolitan* or *Psychology Today* versions of psychology, ecopsychology may prompt the expected comment: What will those silly psychologists think of next? Psychology already has problems with not being taken seriously, generally speaking, by the medical profession or the rest of academia. To the extent that well-intentioned but scientifically ill-prepared ecopsychologists push for acceptance within a larger psychological body of professionals, then, sooner or later, their credentials, abilities, professional training, and claims will be tested and scrutinized.

Whitman's eagles can afford dangerous or daring amorous play or dalliance – even if they are both males. They are, after all, eagles, and in my book, eagles can do whatever they like. Ecopsychology could be like the dalliance of eagles to the extent that it seems not that interested in being recognized as a bona fide scientific enterprise, or interested in being treated with respect when that respect comes from clarifying central issues and defining terms in a satisfactory manner: *protocolizing* language so that it serves the scientific enterprise.

Neither should ecopsychologists be annoyed or surprised that, when 'selling' their area of interest to the masses or other professionals, these folk scratch their heads in disbelief or confusion when that ecopsychologist is in a tangle or in ignorance with respect to the basic terms s/he uses while describing her/his enterprise,

oblivious to the wisdom of the natural sciences.

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