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Is There an Ecological Unconscious?

By DANIEL B. SMITH

About eight years ago, Glenn Albrecht began receiving frantic calls from residents of the Upper Hunter Valley, a 6,000-square-mile region in southeastern Australia. For generations the Upper Hunter was known as the “Tuscany of the South” — an oasis of alfalfa fields, dairy farms and lush English-style shires on a notoriously hot, parched continent. “The calls were like desperate pleas,” Albrecht, a philosopher and professor of sustainability at Murdoch University in Perth, recalled in June. “They said: ‘Can you help us? We’ve tried everyone else. Is there anything you can do about this?’”

Residents were distraught over the spread of [coal](#) mining in the Upper Hunter. Coal was discovered in eastern Australia more than 200 years ago, but only in the last two decades did the industry begin its exponential rise. Today, more than 100 million tons of black coal are extracted from the valley each year, primarily by open-pit mining, which uses chemical explosives to blast away soil, sediment and rock. The blasts occur several times a day, sending plumes of gray dust over ridges to settle thickly onto roofs, crops and the hides of livestock. Klieg lights provide a constant illumination. Trucks, draglines and idling coal trains emit a constant low-frequency rumble. Rivers and streams have been polluted.

Albrecht, a dark, ebullient man with a crooked aquiline nose, was known locally for his activism. He participated in blockades of ships entering Newcastle (near the Upper Hunter), the largest coal-exporting port in the world, and published opinion articles excoriating the Australian fossil-fuel industries. But Albrecht didn’t see what he could offer besides a sympathetic ear and some tactical advice. Then, in late 2002, he decided to see the transformation of the Upper Hunter firsthand.

“There’s a scholar who talks about ‘heart’s ease,’” Albrecht told me as we sat in his car on a cliff above the Newcastle shore, overlooking the Pacific. In the distance, just before the earth curved out of sight, 40 coal tankers were lined up single file. “People have heart’s ease when they’re on their own country. If you force them off that country, if you take them away from their land, they feel the loss of heart’s ease as a kind of vertigo, a disintegration of their whole life.” Australian aborigines, Navajos and any number of indigenous peoples have reported this sense of mournful disorientation after being displaced from their land. What Albrecht realized during his trip to the Upper Valley was that this “place pathology,” as one philosopher has called it, wasn’t limited to natives. Albrecht’s petitioners were anxious, unsettled, despairing, depressed — just as if they had been forcibly removed from the valley. Only they hadn’t; the valley changed around them.

In Albrecht’s view, the residents of the Upper Hunter were suffering not just from the strain of living in difficult conditions but also from something more fundamental: a hitherto unrecognized psychological condition. In a 2004 essay, he coined a term to describe it: “solastalgia,” a combination of the Latin word solacium (comfort) and the Greek root *-algia* (pain), which he defined as “the pain experienced when there

is recognition that the place where one resides and that one loves is under immediate assault . . . a form of homesickness one gets when one is still at 'home.' ” A neologism wasn't destined to stop the mines; they continued to spread. But so did Albrecht's idea. In the past five years, the word “solastalgia” has appeared in media outlets as disparate as Wired, The Daily News in Sri Lanka and [Andrew Sullivan](#)'s popular political blog, The Daily Dish. In September, the British trip-hop duo Zero 7 released an instrumental track titled “Solastalgia,” and in 2008 Jukeen, a Slovenian recording artist, used the word as an album title. “Solastalgia” has been used to describe the experiences of Canadian Inuit communities coping with the effects of rising temperatures; Ghanaian subsistence farmers faced with changes in rainfall patterns; and refugees returning to New Orleans after Katrina.

The broad appeal of solastalgia pleases Albrecht; it has helped earn him hundreds of thousands of dollars in research grants as well as his position at Murdoch. But he is not particularly surprised that it has caught on. “Take a look out there,” he said, gesturing to the line of coal ships. “What you're looking at is [climate change](#) queued up. You can't get away from it. Not in the Upper Hunter, not in Newcastle, not anywhere. And that's exactly the point of solastalgia.” Just as the loss of “heart's ease” is not limited to displaced native populations, solastalgia is not limited to those living beside quarries — or oil spills or power plants or [Superfund](#) sites. Solastalgia, in Albrecht's estimation, is a global condition, felt to a greater or lesser degree by different people in different locations but felt increasingly, given the ongoing degradation of the environment. As our environment continues to change around us, the question Albrecht would like answered is, how deeply are our minds suffering in return?

Albrecht's philosophical attempt to trace a direct line between the health of the natural world and the health of the mind has a growing partner in a subfield of psychology. Last August, the American Psychological Association released a 230-page report titled “Interface Between Psychology and Global Climate Change.” News-media coverage of the report concentrated on the habits of human behavior and the habits of thought that contribute to global warming. This emphasis reflected the intellectual dispositions of the task-force members who wrote the document — seven out of eight were scientists who specialize in decision research and environmental-risk management — as well as the document's stated purpose. “We must look at the reasons people are not acting,” Janet Swim, a [Penn State](#) psychologist and the chairwoman of the task force, said, “in order to understand how to get people to act.”

Yet all the attention paid to the behavioral and cognitive barriers to safeguarding the environment — topics of acute interest to policy makers and activists — disguised the fact that a significant portion of the document addressed the supposed emotional costs of ecological decline: anxiety, despair, numbness, “a sense of being overwhelmed or powerless,” grief. It also disguised the unusual background of the eighth member of the task force, Thomas Doherty, a clinical psychologist in Portland, Ore. Doherty runs a private therapeutic practice called Sustainable Self and is the most prominent American advocate of a growing discipline known as “ecopsychology.”

There are numerous psychological subfields that, to one degree or another, look at the interplay between human beings and their natural environment. But ecopsychology embraces a more revolutionary paradigm: just as Freud believed that neuroses were the consequences of dismissing our deep-rooted sexual and aggressive instincts, ecopsychologists believe that grief, despair and anxiety are the consequences of dismissing equally deep-rooted ecological instincts.

“If you look at the beginnings of clinical psychology,” Patricia Hasbach, a psychotherapist and prominent ecopsychologist based in Eugene, told me, “the focus was on intrapsychic forces” — the mind-bound interplay of ego, id and superego. “Then the field broadened to take into account interpersonal forces such as relationships and interactions between people. Then it took a huge leap to look at whole families and systems of people. Then it broadened even further to take into account social systems” and the importance of social identities like race, gender and class. “Ecopsychology wants to broaden the field again to look at ecological systems,” she said. “It wants to take the entire planet into account.”

The terms in which ecopsychology pursues this admittedly ambitious goal are steeped in the field’s countercultural beginnings. Ecopsychology emerged in the early 1960s, just as the modern environmental movement was gathering strength, when a group of Boston-area graduate students gathered to discuss what they saw as the isolation and malaise infecting modern life. It had another brief period of efflorescence, particularly on the West Coast and among practitioners of alternative therapies, in the early ’90s, when Theodore Roszak, a professor of history (he coined the word “counterculture”) published a manifesto, “The Voice of the Earth,” in which he criticized modern psychology for neglecting the primal bond between man and nature. “Mainstream Western psychology has limited the definition of mental health to the interpersonal context of an urban-industrial society,” he later wrote. “All that lies beyond the citified psyche has seemed of no human relevance — or perhaps too frightening to think about.” Ecopsychology’s eclectic following, which includes therapists, researchers, ecologists and activists, still reflects these earlier foundations. So does its rhetoric. Practitioners are as apt, if not more apt, to cite Native American folk tales as they are empirical data to make their points.

Yet even as it remains committed to its origins, ecopsychology has begun in recent years to enter mainstream academic circles. Last April, Doherty published the first issue of *Ecopsychology*, the first peer-reviewed journal dedicated to “the relationship between environmental issues and mental health and well-being.” Next year, [M.I.T. Press](#) will publish a book of the same name, edited by Hasbach and Peter Kahn, a developmental psychologist, and Jolina Ruckert, a Ph.D. candidate, both at the [University of Washington](#). The volume brings together scholars from a range of disciplines, among them the award-winning biologist Lynn Margulis and the anthropologist Wade Davis, as it delves into such areas as “technological nature” and how the environment affects human perception. Ecopsychology is taught at Oberlin College, Lewis & Clark College and the [University of Wisconsin](#), among other institutions.

Ecopsychologists are not the first to embrace a vital link between mind and nature. They themselves admit as much, emphasizing the field’s roots in traditions like Buddhism, Romanticism and Transcendentalism. They point to affinities with evolutionary psychology — to the idea that our responses to the environment are hard-wired because of how we evolved as a species. They also point to biophilia, a hypothesis put forward by the eminent [Harvard](#) biologist E. O. Wilson, in 1984, that human beings have an “innate tendency to focus on life and lifelike processes.” Though Wilson’s idea has been criticized as both deterministic and so broad as to be untestable, the notion that evolution endowed humans with a craving for nature struck a lasting chord in many sectors of the scientific community. Over the past quarter-century, Wilson’s hypothesis has inspired a steady flow of articles, books, conferences and, last year, the E. O. Wilson Biophilia Center in northwest Florida.

But unlike Wilson and his followers, ecopsychologists tend to focus on the pathological aspect of the

mind-nature relationship: its brokenness. In this respect, their project finds echoes in the culture at large. Recently, a number of psychiatrically inflected coinages have sprung up to represent people's growing unease over the state of the planet — “nature-deficit disorder,” “ecoanxiety,” “ecoparalysis.” The terms have multiplied so quickly that Albrecht has proposed instituting an entire class of “psychoterratic syndromes”: mental-health issues attributable to the degraded state of one's physical surroundings. Ecopsychologists, many of whom are licensed clinicians, remain wary of attributing specific illnesses to environmental decline or of arguing that more-established disorders have exclusively environmental causes. Rather, they propose a new clinical approach based on the idea that treating patients in an age of ecological crisis requires more than current therapeutic approaches offer. It requires tapping into what Roszak called our “ecological unconscious.”

LAST JUNE, I PAID a visit to Doherty, who works in a stone-fronted building in northeast Portland, in an office decorated with a sweeping topographical map of Oregon and a fountain that trickles water onto a pile of stones. He has receding red hair and a red mustache and beard; a small silver hoop dangles from the cartilage of his left ear. Doherty was raised in a working-class neighborhood in Buffalo and then went to [Columbia University](#), where he majored in English. Afterward, he worked in a variety of jobs that reflected his interest in the environment: fisherman, wilderness counselor, river-rafting guide, door-to-door fund-raiser for [Greenpeace](#).

As a therapist with activist credentials in a “green” city on the West Coast, Doherty is fairly representative of ecopsychologists today. He is also typical in that he was inspired to enter the field by Roszak's “Voice of the Earth.” To some extent Doherty remains under Roszak's spell. When we met, he talked about “an appropriate distrust of science,” and the “dualistic” character of empiricism — the mind/body split — which gives society “free rein to destroy the world.” But he recognizes that ecopsychology endorses a few dualisms of its own. “A more simplistic, first-generation ecopsychology position simplifies the world,” he said. “Either you're green or you're not. Either you're sane or you're not. It conflates mental health and/or lack of mental health with values and choices and the culture.” His mission, he said, is to spearhead a “second-generation ecopsychology” that leaves these binaries behind.

The bulk of his work is therapeutic. Like any therapist, Doherty, who has a doctorate in clinical psychology, sees patients and discusses routine concerns like sex and family dynamics. Unlike most therapists, he asks about patients' relationships with the natural world — how often they get outdoors, their anxieties about the state of the environment. He recently developed a “sustainability inventory,” a questionnaire that measures, among typical therapeutic concerns like mood, attitudes and the health of intimate relationships, “comfort with your level of consumption and ecological footprint.”

The ways in which clinicians perform ecotherapy vary widely. Patricia Hasbach often conducts sessions outdoors; she finds that a natural setting helps to broaden a client's perspective, has restorative benefits and can serve as a source of powerful metaphors. “Ecotherapy stretches the boundaries of the traditional urban, indoor setting,” she told me. “Nature provides a live and dynamic environment not under the control of the therapist or client.” Often this leads to revelatory sensory experiences, as in the case of one client who struggled with a sense of emotional numbness. The feeling dissipated after he put his feet in an icy mountain stream.

Doherty, who teaches a class on ecotherapy with Hasbach at Lewis & Clark, places less emphasis on the

outdoors — not only because his office is located in an especially urban section of Portland but also because he worries about perpetuating a false dichotomy between the wilderness and the city. His Sustainable Self practice attracts a clientele that is typically self-selecting and eager to inject an ecological perspective into their sessions. Usually, his clients don't come to him with symptoms or complaints that are directly attributable to environmental concerns, but every so often he has to engage in what he calls "grief and despair work." For example, one client, Richard Brenne, a climate-change activist and an avid outdoorsman, came to Doherty because he was so despondent about the state of the planet and so dedicated to doing something to help that it was damaging his relationship with his family. In an e-mail message to me, Brenne praised Doherty for helping him face the magnitude of the problem without becoming despairing or overwrought. Some would argue that treating Brenne's anxiety about the environment and the negative effect it had on his family life is no different from treating a patient whose anxieties about work cause problems at home. But for Doherty, treating an obsession with ecological decline requires understanding how the bond between the patient and the natural world may have been disrupted or pathologized. Doherty is currently working on a theoretical model in which a person's stance toward environmental concerns can be categorized as "complicated or acute," "inhibited or conflicted" or "healthy and normative."

Doherty is eager to test his therapeutic ideas in a broader arena by urging the field to back up its claims with empirical data. Many subfields of clinical psychology have had to make this transformation in the past decade as calls have grown louder and louder for therapeutic systems to prove their efficacy in quantifiable ways. This shift is arguably harder on ecopsychology than it is on others: in the past, the field hasn't just sidestepped science; it has denigrated it as a system of inquiry that objectifies the natural world.

Doherty's journal, *Ecopsychology*, sometimes feels like an awkward marriage of *Orion Magazine* and *The American Journal of Psychology*, combining personal essays about communing with nature with more theoretical articles. In the first issue, Martin Jordan, a psychologist at the University of Brighton in Britain, evoked Kleinian attachment theory to warn against the "naïve" mind-set that sees the natural world as some "perfect . . . benevolent parent." Such an outlook, he argues, isn't just untruthful — nature is as harsh and inhospitable as it is salubrious and inviting — it's a form of escapism, a sign that someone is less in love with nature than out of love with society.

It is not that Doherty is unfriendly to the spiritual thrust of ecopsychology; the shelves in his office are filled with volumes of nature poetry and mythology. But he hopes to press his colleagues to realize that "tending data sets and tending souls are not mutually exclusive," as he writes in his inaugural editorial. "The idea that personal health and planetary health are connected, that's not just an idea," Doherty told me. It is a proposition, he said, and that proposition can and should be tested.

SUPPORT FOR ecopsychology's premise that an imperiled environment creates an imperiled mind can be found in more established branches of psychology. In a recent study, Marc Berman, a researcher in cognitive psychology and industrial engineering at the [University of Michigan](#), assigned 38 students to take a nearly three-mile walk — half in the Nichols Arboretum in Ann Arbor and half along a busy street. His purpose was to validate attention-restoration theory (A.R.T.), a 20-year-old idea that posits a stark difference in the ability of natural and urban settings to improve cognition. Nature, A.R.T. holds, increases focus and memory because it is filled with "soft fascinations" (rustling trees, bubbling water) that give those

high-level functions the leisure to replenish, whereas urban life is filled with harsh stimuli (car horns, billboards) that can cause a kind of cognitive overload. In Berman's study, the nature-walkers showed a dramatic improvement while the city-walkers did not, demonstrating nature's significant restorative effects on cognition.

Peter Kahn, the developmental psychologist and a member of Ecopsychology's editorial board, has been more explicitly testing some of ecopsychology's underlying principles. "If you look at psychology today," Kahn told me recently, "it still often focuses on behavior" — understanding and changing how people act toward their environments. This is an explicit aim of a branch of psychology known as conservation psychology, and it has obvious practical value. Ecopsychology, Kahn said, asks a different question: how does nature optimize the mind?

Recently, Kahn set out to study how we respond to real versus digital representations of nature. In an experiment reported in *The Journal of Environmental Psychology*, Kahn and his colleagues subjected 90 adults to mild stress and monitored their heart rates while they were exposed to one of three views: a glass window overlooking an expanse of grass and a stand of trees; a 50-inch plasma television screen showing the same scene in real time; and a blank wall. Kahn found that the heart rates of those exposed to the sight of real nature decreased more quickly than those of subjects looking at the TV image. The subjects exposed to a TV screen fared just the same as those facing drywall.

In themselves, these findings may seem merely to support what many already hold to be true: the authentic is better than the artificial. Nature is more healthful than television. But for Kahn, the plasma-screen study speaks to two powerful historical trends: the degradation of large parts of the environment and the increasingly common use of technology (TV, video games, the Internet, etc.) to experience nature secondhand. "More and more," Kahn writes, "the human experience of nature will be mediated by technological systems." We will, as a matter of mere survival, adapt to these changes. The question is whether our new, nature-reduced lives will be "impoverished from the standpoint of human functioning and flourishing."

Like Doherty, Kahn is aware that many scientists in the profession are apt to disapprove of concepts as seemingly unquantifiable as "human flourishing." Several months ago, I called Alan Kazdin, a former president of the American Psychological Association and a professor of psychology and child psychiatry at [Yale](#), to ask his opinion of ecopsychology. Kazdin mentioned the discipline in a 2008 column, but when we spoke he was hazy and had to look it up. "Modern psychology is about what can be studied scientifically and verified," he finally said. "There's a real spiritual looseness to what I'm seeing here."

Second-generation ecopsychologists would not necessarily disagree with this judgment. But they would dispute that "spiritual looseness" has no place in modern psychology. "Have you ever heard of rewilding?" Kahn asked me. Rewilding is a popular concept in conservation biology that was developed in the mid-1990s by Michael Soulé, an emeritus professor of environmental studies at the [University of California, Santa Cruz](#). The idea is that the best way to restore and maximize the resilience of ecosystems is from the top down, by reintroducing and nourishing predatory "keystone" species like bears, wolves and otters. "We want to do the same thing," Kahn said, "but from the psychological side — from the inside out. We want to rewild the psyche."

As with much of second-generation ecopsychology, Kahn's research into rewilding the psyche is still in its early stages; he has been exploring the idea on a blog he writes for the Web site of Psychology Today. But it rubs up against a fundamental problem of ecopsychology: even if we can establish that as we move further into an urban, technological future, we move further away from the elemental forces that shaped our minds, how do we get back in touch with them?

That question preoccupied Gregory Bateson, a major influence on ecopsychologists and something of a lost giant of 20th-century intellectual history. Bateson, an anthropologist by training, conducted fieldwork in Bali with Margaret Mead, his wife of 14 years, in the 1930s, but in midcareer he moved away from conventional ethnology and began conducting studies in areas like animal communication, social psychology, comparative anatomy, aesthetics and psychiatry. But what most interested Bateson, as the title of his 1972 book "Steps to an Ecology of Mind" suggests, were complex systems.

It was Bateson's belief that the tendency to think of mind and nature as separate indicated a flaw at the core of human consciousness. Writing several years after Rachel Carson's "Silent Spring," at a time when the budding environmental movement was focused on the practical work of curbing DDT and other chemical pollutants, Bateson argued that the essential environmental crisis of the modern age lay in the realm of ideas. Humankind suffered from an "epistemological fallacy": we believed, wrongly, that mind and nature operated independently of each other. In fact, nature was a recursive, mindlike system; its unit of exchange wasn't energy, as most ecologists argued, but information. The way we thought about the world could change that world, and the world could in turn change us.

"When you narrow down your epistemology and act on the premise 'what interests me is me or my organization or my species,' you chop off consideration of other loops of the loop structure," Bateson wrote. "You decide that you want to get rid of the byproducts of human life and that Lake Erie will be a good place to put them. You forget that the ecomental system called Lake Erie is a part of your wider ecomental system — and that if Lake Erie is driven insane, its insanity is incorporated in the larger system of your thought and experience." Our inability to see this truth, Bateson maintained, was becoming monstrously apparent. Human consciousness evolved to privilege "purposiveness" — to get us what we want, whether what we want is a steak dinner or sex. Expand that tendency on a mass scale, and it is inevitable that you're going to see some disturbing effects: red tides, vanishing forests, smog, global warming. "There is an ecology of bad ideas, just as there is an ecology of weeds," Bateson wrote, "and it is characteristic of the system that basic error propagates itself."

So what to do? How do you go about rebooting human consciousness? Bateson's prescription for action was vague. We needed to correct our errors of thought by achieving clarity in ourselves and encouraging it in others — reinforcing "whatever is sane in them." In other words, to be ecological, we needed to feel ecological. It isn't hard to see why Bateson's ideas might appeal to ecopsychologists. His emphasis on the interdependence of the mind and nature is the foundation of ecotherapy. It is also at the root of Kahn's notion that "rewilding" the mind could have significant psychological benefits. But it also isn't hard to see how the seeming circularity of Bateson's solution — in order to be more ecological, feel more ecological — continues to bedevil the field and those who share its interests.

Last year, Glenn Albrecht, the Australian philosopher and an admirer of Bateson, began an investigation into what psychological elements might protect a given environment from degradation. In popularizing

“solastalgia,” he drew widespread attention to the mental-health costs of environmental destruction; but like scientists who document the melting of the polar ice caps or mass extinction, Albrecht was studying decline. He wanted to study environmental success.

Albrecht began interviewing residents of the Cape to Cape region, a 60-mile-long stretch of land in southwestern Australia — a wine-country Eden, lush and bucolic and rife with sustainable industries, from organic agriculture to ecotourism. Numerous factors — geographic, political, historical, economic — most likely allowed the Cape to Cape region to remain relatively unsullied. But Albrecht proposes that the main factor is psychological. The people of the region, he told me, display an unusually strong “sense of interconnectedness” — an awareness of the myriad interacting components that make up a healthy environment. True to form, Albrecht has come up with a concept to encapsulate this idea. He has begun describing the Cape to Cape region as a study in “soliphilia”: “the love of and responsibility for a place, bioregion, planet and the unity of interrelated interests within it.” He says he hopes that, like “solastalgia,” this neologism will spread and that it will change how people think about their relationship to the environment.

Will “soliphilia” have the broad appeal of “solastalgia”? It seems unlikely. “Solastalgia” described an emotional response to environmental degradation that, in the age of global climate change — not to mention in the age of such cultural touchstones as “Wall-E,” “The Road” and “Avatar” — feels universal. “Soliphilia” describes a psychological foundation for sustainability that seems to depend on already having the values that make sustainability possible: the residents of the Cape to Cape might have a “sense of interconnectedness,” but how do the rest of us gain, or regain, that sense?

At present, ecopsychology seems to be struggling with this question. Philosophically, the field depends on an ideal of ecological awareness or communion against which deficits can then be measured. And so it often seems to rest on assuming as true what it is trying to prove to be true: being mentally healthy requires being ecologically attuned, but being ecologically attuned requires being mentally healthy. And yet, in its ongoing effort to gain legitimacy, ecopsychology is at least looking for ways to establish standards. Recently, *The American Psychologist*, the journal of the American Psychological Association, invited the members of the organization’s climate-change task force to submit individual papers; Thomas Doherty is taking the opportunity to develop his categorization of responses to environmental problems. His model, which he showed me an early draft of, makes distinctions that are bound to be controversial: at the pathological end of the spectrum, for example, after psychotic delusions, he places “frank denial” of environmental issues. The most telling feature of the model, however, may be how strongly it equates mental health with the impulse to “promote connection with nature” — in other words, with a deeply ingrained ecological outlook. Critics would likely point out that ecopsychologists smuggle a worldview into what should be the value-neutral realm of therapy. Supporters would likely reply that, like Bateson, ecopsychologists are not sneaking in values but correcting a fundamental error in how we conceive of the mind: to understand what it is to be whole, we must first explain what is broken.

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