

WHITHER ENVIRONMENTAL PSYCHOLOGY? THE TRANSPERSONAL ECOPSYCHOLOGY CROSSROADS

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Abstract

This paper considers the nature, status and direction of 'ecopsychology' and its relationship to psychology and environmental psychology. A brief historical perspective is provided, along with an examination of what is currently encompassed by the term, and by whom, with a particular focus on the writings of Roszak (1992). An attempt is made to separate social movement from changing social representation and to distinguish psychological content and focus from ideology, individual and societal change agenda, and popular culture. The paper gives particular attention to the nature and role of 'self' as ultimate target and agent of meaningful change, both in the context of conservation initiatives and with respect to therapeutic encounter/intervention. The nature and expression of ecopsychology in Australia are also briefly explored, as are the representations of indigenous 'earth wisdom' and spirituality as touchstone for ecosystem 'sanity'. Three final questions are posed and discussed in the paper. What does ecopsychology offer psychology? What does psychology have to offer ecopsychology? Can environmental psychology encompass ecopsychology? The prognosis for environmental psychology and the greening of psychology is explored.

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Introduction

... listen

This living flowing land
is all there is, forever

We are it
it sings through us ...

Gary Snyder

these: is this an area of psychology? What are some concerns and cautions worth noting? What does ecopsychology have to offer to interested psychologists, particularly environmental psychologists? What, if anything, does psychology have to offer to ecopsychology? What about environmental psychology? Will it, can it, encompass ecopsychology?

What position should psychologists take with respect to ecopsychology, a very visible, popular and political representation of psychology vis-à-vis the environment? I would like to offer the perspective of an environmental psychologist, asking whether this is a road that psychology, and in particular environmental psychology, should take. My perspective is that of an academic and researcher, further distanced by long-term residence in Australia. It is motivated by genuine interest in as well as some genuine concerns with 'ecopsychology'. After briefly outlining what ecopsychology appears to be, a number of questions are posed. They are essentially

What is Ecopsychology?

Theodore Roszak is arguably the individual most closely associated with the contemporary popular articulation of what ecopsychology is. His treatment is that of a historian/activist, steeped in the history of ideas and social movements of which he has been both participant recorder and protagonist. The work for which he is best known, *The Making of a Counterculture* (1969), traced the popular disenchantment and disillusionment with government, the war in Vietnam, and the then salient environmental degradation of the 60s. His most recent book, *The*

Voice of the Earth: An exploration of ecopsychology (1992), traces the intertwined roots of psychiatry, psychology and environmental consciousness.

Roszak is specifically interested in 'connecting' with psychologists.

I'm working between two main audiences—environmentalists and psychologists—with a view to establishing some valuable common ground. I have long felt that the ecologists need more psychological sensitivity in the way they present themselves and their demanding agenda to the public. On the other hand, the psychotherapists who might provide more savvy about such matters have had little to offer where environmental values are concerned. These two communities need each other, but they are not yet on speaking terms (Roszak, 1992b, p. 18).

What is ecopsychology? Roszak offers the following comment:

This is an essay in ecopsychology. Its goal is to bridge our culture's long-standing, historical gulf between the psychological and ecological, to see the needs of the planet and the person as continuum. In search of a greater sanity, it begins where many might say sanity leaves off: at the threshold of the nonhuman world. In a sense that weaves science and psychiatry, poetry and politics together, the ecological priorities of the planet are coming to be expressed through our most private spiritual travail. The Earth's cry for rescue from the punishing weight of the industrial system we have created is our own cry for a scale and quality of life that will free each of us to become the complete person we were born to be. (1992a, p. 14).

In the epilogue of *The Voice of the Earth* Roszak articulates a set of principles which provide context and closure, a guide for listening to 'the Self that speaks through the self'. These principles provide a convenient window and frame of reference for discussing ecopsychology.

(1) The core of the mind is the ecological unconscious. For ecopsychology, repression of the ecological unconscious is the deepest root of collusive madness in industrial society; open access to the ecological unconscious is the path to sanity.

(2) The contents of the ecological unconscious represent, in some degree, at some level of mentality, the living record of cosmic evolution, tracing back to distant initial conditions in the history of time. Contemporary studies in the ordered complexity of nature tell us that life and mind emerge from this evolutionary tale as culminating natural systems within the unfolding sequence of physical, biological, mental and cultural systems we know as 'the universe'. Ecopsychology draws upon these findings of the new cosmology, striving to make them real to experience.

(3) Just as it has been the goal of previous therapies to recover the repressed contents of the unconscious, so the goal of ecopsychology is to awaken the

inherent sense of environmental reciprocity that lies within the ecological unconscious. Other therapies seek to heal the alienation between person and person, person and family, person and society. Ecopsychology seeks to heal the more fundamental alienation between the person and the natural environment.

(4) For ecopsychology, as for other therapies, the crucial stage of development is the life of the child. The ecological unconscious is regenerated, as if it were a gift, in the newborn's enchanted sense of the world. Ecopsychology seeks to recover the child's innately animistic quality of experience in functionally 'sane' adults. To do this, it turns to many sources, among them the traditional healing techniques of primary people, nature mysticism as expressed in religion and art, the experience of wildness, the insights of Deep Ecology. It adapts these to the goal of creating the ecological ego.

(5) The ecological ego matures toward a sense of ethical responsibility with the planet that is as vividly experienced as our ethical responsibility to other people. It seeks to weave that responsibility into the fabric of social relations and political decisions.

(6) Among the therapeutic projects most important to ecopsychology is the re-evaluation of certain compulsively 'masculine' character traits that permeate our structures of political power and which drive us to dominate nature as if it were an alien and rightless realm. In this regard, ecopsychology draws significantly on some (not all) of the insights of ecofeminism and Feminist Spirituality with a view to demystifying the sexual stereotypes.

(7) Whatever contributes to small scale social forms and personal empowerment nourishes the ecological ego. Whatever strives for large-scale domination and the suppression of personhood undermines the ecological ego. Ecopsychology therefore deeply questions the essential sanity of our gargantuan urban-industrial culture, whether capitalistic or collective in its organisation. But it does so without necessarily rejecting the technological genius of our species or some life-enhancing measure of the industrial power we have assembled. Ecopsychology is *post*-industrial not *anti*-industrial in its social orientation.

(8) Ecopsychology holds that there is a synergistic interplay between planetary and personal well-being. The term 'synergy' is chosen deliberately for its traditional theological connotation, which once taught that the human and divine are cooperatively linked in the quest for salvation. The contemporary ecological translation of the term might be: the needs of the planet are the needs of person, the rights of the person are the rights of the planet (Roszak, 1992a, pp. 320–321).

Roszak's voice is not a lone cry. Many contemporary natural and social scientists, philosophers, theologians, politicians and poets are writing about how we think and feel about the earth, how we construct—and in turn experience and value—the nature of the relationship between ourself and the

planet (e.g. Snyder, 1969, 1990; Dubos, 1972; Shepard, 1973, 1982; White, 1973; Naess, 1983; Devall & Sessions, 1985; Myers, 1985, 1990; Berry, 1988, 1990; Goldsmith, 1988; Seed *et al.*, 1988; Ehrlich, 1990; Gore, 1992; Stern, 1992; Rapoport, 1993; Suzuki, 1993; Zimmerman *et al.*, 1993).

It is difficult to know how to respond, as a psychologist, to Roszak's 'guide'. Few would contest the proposition that to know ourselves truly we need to examine our connections, past and present, to the larger biological and cultural life-support and meaning systems of which we are part and product. Our phenotype is clearly an exquisite design solution to life in terms of phylogenetic learning and collective experiential programming, and a constituent part of this web of life. The conscious accessibility of this collective experience, across species and time, is more difficult to accept, however, as is the natural 'sanity' and Wordsworthian clarity and wisdom of childhood vision. It is, however, worth setting prejudices aside to explore an alternative framing of the roots of the ecological crisis—and what is wrong with psychology. Many obviously feel that Roszak has distilled the essence of the problem and given voice to the planet.

Powerful, compelling, extraordinary. We need urgently to heal our relationship with our life-giving planet and feel deeply the intimate connection with nature Roszak so beautifully describes. (Al Gore, from the jacket cover of *The Voice of the Earth*)

Representations of psychology

There are many questions that come to mind at this point. What is meant by 'psychology' in this context? Are we talking about psychotherapy, the discipline, lay psychology, or a more encompassing, humanistic notion premised on what psychology might or should be? Again, Roszak's own statements are illuminating:

At its deepest level, psychology is the search for sanity. And sanity at its deepest level is the health of the soul. In these respects, psychology, whatever techniques it may use, is necessarily a philosophical pursuit, a critical examination of ethical conduct, moral purpose, and the meaning of life. Every major philosophical and religious system of the past has grounded itself in a psychology, seeking to heal the soul of its wounds and guide it to salvation. (p. 51)
Psychology, like theology, must eventually come to terms with original sin. Both madness and sin presuppose a preexisting state of grace. At some point, the healthy animals we once were, if only for some split second of prenatal or postnatal time, lost that primal sanity and grew up to become the bad

mothers and fathers who made all the bad institutions. Within the framework of an ecopsychology, we raise the question: how did a psyche that was once symbiotically rooted in the planetary ecosystem produce the environmental crisis we now confront? (p. 306)

My argument, like Abraham Maslow's, holds that there is a psychological dimension to the problem that must be addressed if one is to find a graceful way to connect the mind and the world. How clearly we understand the world depends on the emotional tone with which we confront the world. Care, trust, and love determine that tone, as they do our relationship to another person (p. 41).

The language of Roszak and others unfortunately never quite specifies what is meant by psychology, and referents are encompassing and confusing; at times, however, the clear referent is the profession and practice of psychology.

There is continual reference throughout Roszak's writings to insanity and madness, both on a collective level and scale, with respect to what we have done and are doing to the environment, and with respect to an individual malaise and distortion of the spirit. His comments help us to understand the larger context in which his statements about psychology and self are formed. It is also of interest to consider what 'psychology' and 'madness' encompass in this discourse.

In our hearts we know there is something maniacal about the way we are abusing the planetary environment. The extinction of species, the depletion of the ozone, the annihilation of the rainforests . . . how often do we read reports of the devastation and say "That's crazy!"

We use the word, but in this context 'crazy' has no professional status, no theoretical depth. Our instinctive sense of environmental anxiety is little more than an 'ouch!' that does not tell us why we hurt or how to heal the wound. We look to psychiatrists to teach us the meaning of madness, but our dominant schools of psychotherapy are themselves creations of the same scientific and industrial culture that now weighs so brutally on the planet. Even those who dissent from Freudian orthodoxy remain narrowly focused on what Jung called 'urban neurosis'. They ignore the greater ecological realities that surround the psyche—as if the soul might be saved while the biosphere crumbles. The context of psychiatry stops at the city limits; the nonhuman world that lies beyond is as great a mystery as the depths of the soul.

Where do we turn to find a standard of sanity that comprehends our environmental condition? (Roszak, 1992, p. 19)

While I have chosen to focus the argument on Roszak, there are many who have advanced a similar argument (e.g. Hillman, 1975/1992; Shepard, 1982; Seed *et al.*, 1988; Mack, 1990). Hillman's writ-

ings, in particular, have achieved renewed popularity if not currency (Hillman & Ventura, 1992).

The prospect of general, culturally-ratified, distortions of childhood, of massive disablement of ontogeny as the basis of irrational and self-destructive attitudes toward the natural environment is the prospect to which I now turn. (ix) . . . the contention of this book—that there are profound psychic dislocations at the root of modern society (xii). . . . Our species once did (and in some small groups still does) live in stable harmony with the natural environment. That was not because men were incapable of changing . . . (Hillman, 1975, pp. 3–4).

In many ways the ecopsychology argument of Roszak, Hillman and others is more of a latterday critique of psychiatry—along with a reconsideration of what psychoanalysis offered and can offer—than it is a detailed prospectus of a new discipline or field. It at the same time characterizes past and contemporary individual and societal transactions with the environment as insane, and requiring therapeutic intervention. There is also a clear implication that psychology itself is badly distorted and distorting—of individuals and cultures.

Do the tenets of individualism—based as they are on classical psychology—still hold true for us today? Or, perhaps, as he [Hillman] posits, the psychological model of individuality/individualism/individuation has led us to more isolation, fragmentation, and loss of purpose, for individuals and for society as a whole. Hillman explains further by using a case study to illustrate his ideas: 'The case derives from the pathology of culture rather than from the pathology of the individual, in order to pointedly free psychopathology from its enclosure in the individual self. . . . If we of this society seek ways to connect psychotherapy with social change . . . to release depth psychology from its confines in human personality and return to a study of soul . . . we must draw our cases from pathologies in the culture . . .' It is Hillman's conclusion that psychology's attribution of a private, individual self is delusional. . . . In connecting self-identity to communal action and experience, Hillman is truly re-visioning psychology, and embodying it as a mode of social change. (Editorial summary of speech by James Hillman appearing in Newsletter of the Centre for Psychology and Social Change, Feb 94).

Again, it is difficult to understand clearly what 'psychology' encompasses in these discussions, as reference skips from why and how people behave as they do, to the discipline and practice of psychology, as institutional face of Western culture.

Given that the environmental crisis has been created by an accumulation of human actions and inventions, and not by 'act of God', it is surprising that so little attention has been directed to the role that human nature and psychology play in perpetuating this crisis and in hindering efforts to

reverse destructive trends. Once the interaction between human psychology and environmental destruction is better understood, environmental groups will have the information needed to design and evaluate interventions that *effectively* encourage humanity to address unprecedented, yet often invisible, threats. . . . How has human nature contributed to environmental problems? How does Western industrialised culture compound these problems? How have psychology and its assumptions about human nature contributed to these maladaptive psychological and social trends? What would new conceptual models and practices that lead to achieving a sustainable environment look like? How could a revamped discipline of psychology help change the collective and institutional behaviour that threatens the planet? (Synopsis of panel discussion on 'Psychology as if the whole earth mattered', *Center Review*, 1990, p. 1).

The argument that people must be insane to be behaving the way they are with respect to the environment is no different than similar arguments with respect to smoking, war or the nuclear threat. Clearly these are all instances in which both short- and long-term self and collective interest is radically compromised by ongoing behaviour. To say that such behaviour is 'insane' is, at best, psychologically naive. Such behaviours are arguably irrational, illogical and ultimately life and planet threatening, but they are quintessentially human and psycho-logical, and in their own way 'adaptive' in terms of psychological reality and managed ignorance (Reser & Smithson, 1988).

Historical and cultural perspectives

Ecopsychology must be situated in the sea change of events which took place in North America and indeed the world in the 1960s. It is, in part, an epiphenomenon of this socio-geo-political context and a part of the ensuing social movement which arguably started with the first Earth Day on 22 April 1970. Its more immediate roots are at Esalen, Woodstock, Nimbin and Taos, in the Civil Rights movement and Vietnam, in Rachel Carson's *Silent Spring* (1962), and in the path of bulldozers in threatened environments the world over. Its cultural and intellectual beginnings undoubtedly go back to the Romantic movement. *Naturphilosophie* in Europe (Arkes & Garske, 1982), transcendentalism, the organismic phenomenology of the Gestalt movement (e.g. Goldstein, 1939, 1940), and reflects the more general evolutionary leitmotif that infused the writings of James, Freud and Jung. Many, including of course Roszak (1969, 1979), have been charting its course (e.g. Gale, 1972; Stallings, 1973; Albrecht,

1976; O'Riordan, 1981; Buttel, 1987; Christensen, 1990; Dunlap & Mertig 1992; Gottlieb, 1993). It is noteworthy that the origins of the environmental movement and the human potential movement were intertwined at many levels, and shared spokespersons and celebrities, as well as many values and venues, e.g. Esalen (Shaffer, 1978). Environmentalism became political ideology and quasi-religion for many, with environmentalists and 'greenies' collectively changing personal and societal values and understandings. The 'New Environmental Paradigm' bridged ecological science and Eastern philosophy (Dunlap & Van Liere, 1978; Catton & Dunlap, 1980).

All of this was slowly and inexorably changing social representations dealing with the relationships between beings and the natural environment, a basic and enduring preoccupation of human cultures across the millennia (Kluckhohn & Strodtbeck, 1961). For many, and for society as a whole, the very nature and definition of who one was, of personhood, was changing—in part the product of a postmodern and critical self-reflection and an accompanying hard look at the nature of interrelationships, interconnections and interdependencies, personal and global (Bateson, 1979; Heelas & Lock, 1981; Geertz, 1983; Sampson, 1989; Gergen, 1992; Kvale, 1992). The emphasis on self-encounter which characterized this period was also, essentially and critically, an exploration of sensory awareness and connections with our natural world (Schutz, 1967; Csaky, 1979). Other metaphoric, if not paradigmatic, notions that were changing how we think and feel—or at least reflecting such changes—were the anthropic principle (Barrow & Tipler, 1986), unified general theory, and the Gaia hypothesis (Lovelock, 1972). The Gaia hypothesis in particular, Lovelock's view of the earth as a coherent, self-regulating, self-changing system of life, a living planet (1979, 1988) is an essential starting point in understanding what ecopsychology is all about.

The specific role of psychology as discipline in all of this is a matter of some debate. Psychologist participants were not all from the human potential movement. Many came from university laboratories and lecture theatres, as well as from psychotherapeutic practice. Certainly many 'environmental psychologists', i.e. those academic researchers who were later to identify as environmental psychologists, saw themselves as being caught up by a changing consciousness of the nature and magnitude of environmental problems (Altman & Christensen, 1990). It is interesting that many

behaviourists also saw themselves as playing a critical part.

During the late 1960s, the 100-year-old conservation movement in the United States began to take on a new identity. There was a growing realization that merely conserving wildlife and natural settings was not enough; environmental quality itself was under attack. It became evident that ecosystems and natural resources that serve as humankind's life-support systems are being jeopardized by depletion of natural resources, pollution, and overpopulation. During this period, the conservation movement evolved into the environmental movement and psychology, *especially applied behaviour analysis*, joined in an effort to seek solutions to these problems. There was a developing awareness that the decreasing environmental quality was caused by human behaviour . . . Clearly, maintenance of environmental quality requires the large scale modification of human behaviours (Dwyer *et al.*, 1993, pp. 275–276).

The ecopsychology movement must also be considered in the larger context of postmodernity and the cultural search for substance, meaning, and relevance beyond the Dominant Western Paradigm (Grossberg *et al.*, 1993).

The Australian context

In Australia there are many expressions of ecopsychology, from popular magazines (*Simply Living*, *Nature*, *Southern Crossings*, *Tread Lightly*, *Whole Person*) to itinerant workshops (The Council of all Beings, Red Rock Cherishing Retreat, Sacred Mountain Vision Quests, Awakening Woman), to educational and growth centres (Centre for Planetary Education, Rainforest Information Centre, Sacred Site Within Healing Centre, Touch the Gentle Earth). There has, of course, been considerable commerce with North America in terms of people and ideas, and a number of Australian individuals stand out as particularly noteworthy environmental icons: Helen Caldicott, Peter Garret, John Seed—as has the Australian continent itself and its indigenous peoples. It is also the case that a number of Australian philosophers and deep ecology theorists have been influential spokespersons on behalf of ecopsychology (e.g. David Bennett, Robyn Eckersley, Warwick Fox, Patsy Hallen, Freya Matthews, Richard Sylvan). Perhaps the most significant national focus on ecopsychological issues took place in Canberra in 1989 and 1990 under the aegis of the Fundamental Questions Program, an Australian initiative following from the World Commission on Environment and Development Report, *Our Common Future*. This pro-

gramme, hosted at the Centre for Resource and Environmental Studies of the Australian National University, sought to engender and inform public discussion of the implications for Australian society of the need for long-term ecological sustainability (Boyden *et al.*, 1990). Those papers most directly addressing ecopsychological themes and issues included that of Bennett (1990), on deep environmental ethics, and that of Cock (1991), on values for sustainability—the necessity of transcendence and the sacred.

Is Ecopsychology Psychology?

Is ecopsychology psychology? It is clear that it is not in any professional, disciplinary sense, but this begs some important issues. While some of the language and notions sound 'psychological' they often have very different referents and meanings, and draw from a popular discourse and culture which is quite distinct from the assumptions, methods and practice of psychology as a discipline. 'Psychology' after all, is an integral part of contemporary Western culture and thought, and both informs the discourse and provides requisite symbols, icons and metaphors across a vast spectrum of public preoccupations and concerns. What is perhaps problematic in the present context, however, is that the use of the term psychology does confer a certain professional legitimacy to what is essentially a social movement, with its own values, agenda, and frame of reference. Given that one of the larger metaphors here is one of healing and therapy, and given that there is a rather indiscriminate and unqualified use of 'ecopsychology' in both mental health and environmental contexts, there are dangers.

That few ecopsychologists have credentials in the discipline of psychology is hardly damning, but it does suggest that we should consider the implications of a movement which purports to be setting a new agenda for psychology, and providing a new framework for considering 'self', psychopathology and intervention. It is interesting to note that those few psychologists who are writing in the area are not environmental psychologists; they would almost all identify strongly as humanist psychologist and/or psychotherapists. There would also appear to be considerable affinity between Jungian theorists and analysts and ecopsychology (e.g. Hillman, 1975, 1992; Estes, 1992; Gilbert, 1992). This makes considerable sense if one understands the collective unconscious as an analogue for the genotypic collective experience of a species. Finally, many of those

writing about the 'psychology' of human survival are themselves psychiatrists, not psychologists, which gives a very different character to the discourse (Frank, 1968; Lifton, 1968, 1979; Walsh, 1989; Mack, 1990, 1992).

An example of a clearly psychological perspective is found in the writings of Sarah Conn (e.g. 1990, 1992), a clinical psychologist and research associate of the centre for Psychology and Social Change at the Harvard Medical School, who teaches a course on the self-world connection, 'The psychology of global awareness and social responsibility'. Her perspective weds the threat of eco-collapse to therapeutic intervention and social action.

We all know that massive threats to security, justice and ecological sustainability still exist and in fact are increasing in the world . . . information is not enough. We need to develop new ways to perceive, organize and respond to the information available to us, so that information leads to true change. That kind of change is what we are referring to as **transformation**. For the past nine years, Center researchers have been working in a variety of arenas to develop aspects of an interdisciplinary, systemic understanding of human psychological processes which promote global responsibility—or the ability to respond creatively and constructively to the whole range of issues threatening the earth and its inhabitants. A central part of this work has been to promote better relationships—both human-human and human-Earth relationships. . . . My own work—organized around teaching a course on the self-world connection and its implications for an ecologically responsible mental health and psychotherapy—has focused in part on questioning and transforming **how we see** the self in relationship to the world (Conn, 1992, p. 2).

Conn's distinction between information and knowledge, and ultimate action, addresses fundamental behaviour change issues. We do not have a language or models that well-capture how information translates to knowledge, or the essence of genuine 'concern'. It is noteworthy that Conn's techniques derive directly from the despair and empowerment workshops of Joanna Macy (1983), created to counter the 'psychic numbing' of the nuclear threat, and which rely on guided imagery, experiential learning, emotional flooding and group support. It is also clear that the objective of Conn and others is behaviour change—indeed radical societal change—with the logic and strategies for this change deriving from psychotherapy.

The basic challenge of an ecologically responsible psychotherapy, or ecotherapy, is to look at therapy as a place where the personal problems brought by clients, the so-called personal stories, can be seen not only in their vivid particularities but also as

microcosms of the larger whole, of what is happening in the larger world. This may be called the 'canary in the mine shaft view' of psychotherapy. The world is sick; it needs healing; it is speaking through us . . . As we develop a way of connecting the self and the world, then the goals of therapy become not just personal release but also participation in and contribution to the healing of the world. Our models of psychological health must begin to include reconnection with, reentry into nature. We can begin to see that therapy must enable clients to find themselves in relation to the larger system, to find their niche, to actively occupy it in ways that contribute to the healing of both self and earth (Conn, 1992, pp. 3–4).

Conn sees herself as doing pioneering work in 'global psychotherapy' and feels that examining the global context of one's life 'expands the space' in which to look for solutions to personal problems. Her 'provocative thesis is that, but for our inhibitions and isolation, concern about global issues would naturally galvanize every one of us into action in the interest of our collective survival and would help us to find greater personal clarity and peace in the process' (Everett, 1990, p. 4).

Some Concerns and Cautions

There are clearly some communication and representation problems which must be addressed if ecopsychology is going to be taken seriously by psychology and the larger research and academic community. Ecopsychology is, in the minds of many, synonymous with new age pseudo-science and the alternative environmental and therapeutic fringe. However powerful and cogent its arguments and its Western and non-Western intellectual history, and however critical the problems it is addressing, there remains, for a variety of reasons, a substantial credibility gap.

The concerns which are perhaps most salient in the present context include the identification of ecopsychology as psychology, the representation of ecopsychologists as psychologists, the legitimacy and credibility this confers to practitioners, the seeming uncritical borrowing of constructs and theory from psychology, the explicitly political nature and stated objectives of ecopsychology, the application of ecopsychology to the clinical context, the quasi-religious—and often explicitly religious—character of the discourse, the confounding of levels of analysis and metaphor with reality, the shifting anthropomorphism and anthroexclusion which often characterizes the debate, and the seeming close alignment with new age popular 'psychology'.

Overall these concerns relate to an uncritical reference to and incorporation of both academic and popular psychology, with few distinctions, qualifications, or caveats with respect to arguments, evidence or expertise. In fairness, this is probably understandable for a social movement cum shifting societal consciousness; it is, however, less reasonable for a more serious and focused group of people who are attempting to establish a credible set of alternatives in terms of framing and implementing a human and environmental agenda and an individual level therapeutic model of intervention.

Understandings and representations of 'psychology'

Clearly a basic problem has to do with varying constructions and representations of psychology. The argument presented here is, at one level, a concern with the way in which commonsense understandings of psychology are being presented and accepted as 'accurate' characterizations of the discipline and/or professional psychology in the context and discourse of 'ecopsychology'. This is, admittedly, a somewhat precious concern, given the classic difficulty of specifying what psychology is or should be (e.g. Koch, 1993):

... psychology is misconceived when seen as a coherent science or as any kind of coherent discipline devoted to the empirical study of human beings. The 19th century belief that psychology can be an integral discipline, which led to its institutionalisation as an independent science, has been disconfirmed on every day of the 112 years since its presumptive founding (p. 902).

and the reality of 'psychology' being an integral part of popular culture. Yet the genuine danger here is that the assumptions which attend popular misconceptions of psychology as a profession and discipline may well lead to continued misperceptions, unrealistic expectations, and ethically problematic representations of ecopsychological-based therapies and ecopsychological therapists as psychology and psychologists. The understanding of and representation of psychology by writers such as Roszak also differ, in some respect, from popular notions. He and fellow ecopsychology proponents clearly view psychology in a mental health frame, assuming that its practitioners are primarily mental health practitioners and psychoanalytic in orientation. Psychology is, at points, treated as synonymous with psychiatry, and at other junctures as a promising alternative perspective. The expression 'ecopsychology' of course creates further confusion in that it is very similar to *ecological* psychology, which rep-

resents a very different orientation and frame of reference with respect to environmental analysis (e.g. Brunswick, 1956; Barker, 1968; Gibson, 1979; Kaminsky, 1993).

Morality and madness: psychology or religion?

Related to this continual reference to indigenous and earth wisdom is an implicit ethical stance and argument which constitutes a leitmotif in the ecopsychological literature.

What the new cosmology lacks is the moral consensus that philosophers and artists once bestowed upon the Newtonian worldview. That consensus held for as long as science grounded itself in divine authority and vouched for the importance of human reason. Nothing has been more futile than our effort over the past few centuries to establish values and define sanity within a cultural context that finds no place for the sacred and views life as a marginal anomaly in the universe. The cosmology that gave us that picture of the human condition has now faded from the scene. The time is ripe for a new dialogue between scientific intellect and human need (Roszak, 1992, p. 18).

I suggest that there is a very widespread urge for a new global ethic which will unite people in the kind of moral community which is capable of dealing with the current environment crisis. . . . There is a strong sense of the transcendent value of co-operative effort expressed in many of these books . . . (Rapoport, 1993, p. 173).

This constitutes a sequenced set of problems and confusions for social scientific inquiry. The confounding of ecological 'immorality' with mental illness is a particularly problematic example. This, without qualification, is reminiscent of Elizabethan understandings of mental illness as resulting from moral depravity. The inter-relationships between ethics, morality, and environmental responsibility and management present further conceptual problems, though clearly important ones (Fox, 1985; Stone, 1987; Nash, 1990). The suggestion of a self-evident moral order, immanent in the biosphere, is thought-provoking but problematic. Are we being presented with a proposed new moral order—or being re-aquainted with a very old one by ecopsychologists? Is this moral order inherent in the natural world or is it an artefact of contemporary cultural and social problem construction (e.g. Daniels, 1988; Robinson, 1992)?

The ethical issues, indeed dilemmas, posed by contemporary societies and ecosystem threats, and the critical need of effective legislative/totalitarian and/or moral sanctions (Hardin & Baden, 1977; Fox, 1985) raises the question of the 'religious' status of

ecopsychology. The rhetoric is of spiritual connecting and transformation, there is a clear quest for the sacred and use of ritual, frequent reference to earth magic and animism/transcendentalism, etc. Indeed 'deep ecology' 'goes beyond a limited piecemeal shallow approach to environmental problems and attempts to articulate a comprehensive religious and philosophical world view' (Devall & Sessions, 1985, p. 65). Again, this is not 'damning' in itself. Psychotherapy has been viewed by many as the new religion of today's psychological society, with therapists its new priests, and many areas of commonality, including sociohistorical context, membership, underlying deep structure and common functions (Hillman, 1975/1992; Robbins & Anthony, 1978; Kilbourne & Richardson, 1984). If such functional equivalencies exist between ecopsychology and religion, with respect to how people attempt to satisfy similar needs for identity, meaning, community and support in dealing with shared anxieties and fears, and if this meaning system and societal change agenda is essentially driven by the threat of ecocollapse and moral argument, this would seem to constitute an operational definition of a 'religious' as well as social movement. This sense of mission is strengthened by the suggested use of psychotherapy to heal society and the planet through environmental action.

Part of the problem, or confusion, is that many view the natural world, and indeed life itself as 'sacred'. Such conceptions, particularly in the context of indigenous world views, encompass the interconnections between living beings, the well being of the whole, and a prescribed moral order. This language of the 'sacred' and 'spiritual' can suggest much more than awe, respect, and species humility, in a Western cultural context it conveys organized religion, ideology and—some would argue—a frightening legacy, both with respect to the environment (White, 1973) and in terms of man's inhumanity to man. There would seem to be considerable wisdom in retaining a more assumption-free language for discussing the integrity and well being of the biosphere and/or specific ecosystems. It is still very possible to convey the sense that all decisions and thinking about environmental transactions must make reference to the absolute essentialness of ecosystem integrity and the critical value of all living systems.

It is also important to distinguish the 'spiritual' character and impact of any genuine contemplation of nature with the use of 'religious' discourse and appeals in the service of political and social influence ends. There are many cultural traditions

which acknowledge the awe-inspiring majesty of the natural world, a response which is evoked in such notions as the 'sublime' in Western European literary and aesthetic criticism. This may not differ substantively from the 'sacred' character of many indigenous understandings of the natural world. The perceived spiritual character of the natural world and life itself, is, however, different from the evangelical proselytizing for a new political and social order which characterizes ecopsychological writing and the radical ecology discourse in general. This is not say that the global ecosystem's salvation will not require a new construction of the world, the 'sacred', and humankind's place within this whole. What would appear to be needed is 'the development of a global ethic as a system of cultural values motivating peoples' behaviour on a widespread basis' (Rapoport, 1993, p. 181). As Rapoport points out, however, this is a far more complex and unexplored matter than is the call for a refocusing on values by corporate and academic organizations and spokespersons.

Metaphors, representations and applied social science

There is an aspect of the ecopsychology discourse which is particularly confusing, often disorienting and arguably very anthropocentric. The language, analogies and metaphors used have created a spectrum of powerful images.

The most beautiful object I have ever seen in a photograph, in all my life, is the planet Earth seen from the distance of the moon, hanging there in space, obviously alive. Although it seems at first glance to be made up of innumerable separate species of living things, on closer examination every one of its working parts, including us, is interdependently connected to all other working parts. It is, to put it one way, the only truly closed ecosystem any of us knows about. To put it another way, it is an organism. It came alive, I shall guess, 3.8 billion years ago today, and I wish it a happy birthday and a long life ahead, for our children and their grandchildren and theirs and theirs (Thomas, 1985).

The most pervasive analogy is that of the Gaia hypothesis, the 'notion' that earth's encompassing ecosystem and atmosphere is not dissimilar to a living, sentient being (Lovelock, 1972; Margulis & Lovelock, 1974). This is a notion which has considerable appeal and which is in many ways useful, in attempting to communicate the interrelatedness and interdependencies of global ecosystems, as well, of course, as the possible 'mortality' of such systems given the magnitude of human ecosystem insensi-

tivity. Many literally understand Gaia as a sentient intelligent life form with whom they can, indeed, empathize and identify with, as well as fear.

I use the name Gaia not to propose a human feminine goddess, but to encompass the idea that the entire living pelt of our planet, its thin green rind of life, is actually one single life-form with sense, intelligence and the power to act. . . . the life process around us is driven by an intelligence which is fully capable of recognizing and repairing damage done to itself. . . . It is my main thesis that a new revolutionary has awakened, beside whom human pretenders to the role are as children. This entity is the most determined and dangerous opponent ever to face us . . . It possesses ancient wisdom, is wholly integrated in its purpose and cannot be defeated, but only joined (Pedler, 1991, p. 10, p. 12).

This is dangerous ground in terms of achieving a clear and informed understanding of global environmental problems and possible solutions.

The anthropomorphism evident in Gaian understandings of the biosphere is linked to an extended partly-metaphoric analogy between the human body as complex microsystem and the life support system of the planet. This partakes of an interwoven cultural symbolic heritage and contemporary links with modernity and representation (Lock, 1993). This Gaian perspective subtly outlines and suggests the experiential learning and 'connecting' which characterizes ecopsychology workshops. Not unrelated to this extended anthropomorphism and body symbolism (e.g. Douglas, 1970; Johnson, 1987; Featherstone *et al.*, 1991; Lock, 1993; Scott & Morgan, 1993) is the 'notion' that we are connected to the planet not only in terms of a biological, biochemical interface, but in terms of consciousness itself.

The spirit of the living earth is difficult to define. And the search for words to describe it calls upon each of us to reach deep into the intuitive experiences of our own lives (Samuels & Bennett, 1983, p. 66).

The cause for concern in all of this can be overstated. It is certainly the case that we can feel very attuned to and 'connected' to the larger natural world of which we are a part. This phenomenological reality is positive, healthy and undoubtedly leads to a greater ecological awareness and sensitivity. As well the evolution of human consciousness suggests the inherent tension which accompanied the development of a self-reflective awareness and central importance of a self-world referencing system (Crook, 1980; Ornstein, 1991). Problems begin, however, when we begin to use and equate this sense of connectedness to the planet as the barometer and sine qua non of mental health. While it

is true that in many cultures the integrity and quality of one's *relationships* with one's physical and social world are viewed as essential determinants of well being (e.g. Reser, 1991), one can envision a Western and quite sane consciousness of self as a separate, self-regulating, relatively autonomous individual. While it could be argued that this is a problematic cultural self-awareness and consciousness, it need not be seen as pathological or ecologically destructive.

The complex set of confounds and confusions which appears to permeate the ecopsychology literature arguably stem from Western cultural constructs and conceits concerning 'the self' and personhood. The implicit contradictions inherent in the damning of individualism while investing heavily in a very ego-centred psychoanalytic view of individual health and well-being is a sobering case in point. Clearly, however, ecopsychology has invested heavily in the power of metaphor and myth. There is also no question but that these are very effective vehicles for shaping human understanding and behaviour (Bateson, 1972; 1979; Lakoff & Johnson, 1980; van der Geest & White, 1989; Engel, 1993; Ortony, 1993)—computer 'desktops' and information 'superhighways', 'windows' and 'trashcans' provide a compelling example. It is, however, questionable whether such metaphoric use well serves analytic clarity or real progress in problem conceptualization and solution. Some metaphors can also be deadly.

Indeed, this view of earth as a dead object, an insensate piece of rock so dominates the thought of our day that even such original thinkers as Buckminster Fuller have compared the Earth to a spaceship, and have extrapolated from this metaphor that the solutions to the Earth's problems are comparable to repairing our automobiles or our television sets. From this we might suppose that keeping the earth healthy and habitable would be like sweeping out the spaceship and polishing its hull regularly. Unfortunately this vision of our world has not served us well in the past few decades. The failure lies in the metaphor; the Earth is not a spaceship, it is much more than that (Samuels & Bennett, 1983, p. 4).

Finally, there is a more encompassing metaphor, myth, and construction that ecopsychology has not come to terms with—the metaphor of self (Epstein, 1972; Gergen & Davis, 1985; Daniels, 1988; Cushman, 1992; Semin & Rubini, 1992). While one might argue that ecopsychologists have in fact stressed the untenability of an individual, disembodied self in contrast to the experiential and biological reality of relational self, the larger narrative is premised on some very strong assumptions and

indeed convictions about the objective reality of 'self'. It is interesting that from an Eastern, Buddhist, perspective, the 'self' is very much an illusion (Yoshinori, 1993). The constructionist perspective (Gergen, 1985; Shore, 1991) on 'self' and 'reality' is a valuable one for considering how we frame the ecological crisis and the role of individual behaviour and must at least be addressed.

Indigenous touchstones and earth wisdom

There are other features of ecopsychology which are problematic for a critically thinking academic audience. One such problem is the extent of which proponents of this view appear to appropriate and represent uncritically the nature of indigenous beliefs, ritual and experience with respect to the 'natural' world. In *The Voice of the Earth*, as in many other recent ecopsychology publications, considerable store is placed on the essential harmony and interconnectedness with all species found in indigenous cultures and in pre-industrialized Western society.

Throughout history there have been legends describing Earth as a living being, 'Mother Earth', an entity which nurtures and sustains us. For millions of years people believed that all animals and plants, even rocks, mountains and the sky, evolved from a single source. Within this system of thinking, people viewed themselves as intimately connected to everything around them, from the tiniest insect or pebble to the greatest constellations in the heavens. Human life was not separate from other forms. Everything was related; everything was kin. Each member of the universal community supported each other in perfect harmony (Samuels & Bennett, 1983, p. 3).

The Australian aborigine reflects the capacity of indigenous peoples to remain at one with both their natural world and their spiritual world. As Laurens van de Post has written of the bushmen of the Kalahari, and equally applicable to many indigenous peoples: 'The whole of the cosmos was a family. They had an extraordinary feeling of kinship that burned like a flame and kept them on course, that kept them warm and full of meaning . . . In the modern world we have become so engaged in doing that we have become divorced from the aspect of ourselves which gives meaning' (Myers, 1990, p. 47).

Understanding the universe was a matter of listening, having the ears to hear the music of the spheres, the voice of the Earth. Wisdom meant connecting (Roszak, 1992b, p. 26).

Particular reference is often made to Native Americans and Australian Aborigines. In a similar vein the more popular scientific literature frequently suggests that contemporary industrialized nations can learn valuable lessons on living with

nature from native peoples (Udall, 1963; Posey, 1985; Bunyard, 1989; Knudtson & Suzuki, 1992). The nature, value, sensitivity, and applicability of such indigenous knowledge and ecological consciousness is at least debateable (Alvard, 1993), presuming that the emic perspective, cultural assumptions, and environmental management practices of the indigenous culture in question are genuinely communicated and understood by others. Such discussions of indigenous earth wisdom can be characterized by considerable naivete, misunderstanding and ethnocentrism (Brody, 1983; Cronon, 1983; Riddington, 1988; Rose, 1988; Weatherford, 1988; Versluis, 1992; Alvard, 1993). It is important to appreciate that 'indigenous spirituality' has itself become cultural product and counter-cultural movement (e.g. Hultkrantz, 1990).

Book of the Hopi and a whole series of other similar types of writings are expressions of an accumulation of eclectic bits of information, pulled out of their cultural contexts, and used to reinforce a holistic world view, presently called 'New Age', which perceives the multifaceted world and its problems in a highly stereotyped manner. This 'grass-roots' philosophy is no longer the search for understanding . . . but a totalitarian and fundamentalist alternative to technocratic greed and sloth. The need to check the excesses of technocracy is necessary of course. But the baby has been thrown out with the bathwater . . . if one criticizes the harm done to the Hopis, one is in reality criticizing an integrated world view, a world view characterized by its own exponents as an 'amorphous cultural transition' without creed, dogma or leaders, but which integrates such concerns as 'environmentalism, holistic health, women's rights, social responsibility, and personal spirituality'. My quarrel is with the way native peoples, who have had little or no part in these issues, are used by proponents on both sides of the issues. The overly romanticized and nostalgic view of American Indians as noble savages, born with an environmentalist temperament, is just as harmful as the view proposed by industrialist tyrants laying pipelines on the lands of those same supposedly backward savages. Each group has a vision of its own which has little to do with Hopi reality (Geertz, 1990, 132-133).

There is, of course, the new age fascination with earth magic, shamanism and indigenous healing practices, and an accompanying belief that there exists a body of sacred lore which can be easily tapped and which opens the doors of perception and earth wisdom (e.g. Neihardt, 1932; Waters, 1963; Storm, 1972; Bear & Wabun, 1980; Wolfe, 1988). Such books as Castaneda's *The Teachings of Don Juan* (1970) and *A Separate Reality* (1971), and Harner's *The Way of the Shaman* (1980) were and

remain extremely popular accounts of 'connecting' with this more spiritual relationship with the world. There are countless other sources and 'paths' (e.g. Mindell, 1984, 1993; King, 1990; Villoldo & Jendrensen, 1990; Arrien, 1993).

The point is that this new age appreciation of other culture wisdom and self/world views is typically based on popularized and often distorting accounts rather than authoritative sources, and in any case does not and should not equate with a considered psychological or anthropological perspective on self and natural environment awareness, consciousness, or construction. Nor does it provide, out of cultural context, a very defensible psychotherapeutic or behaviour change model (Atkinson, 1992).

The within-culture phenomenological reality of a profound and experienced connectedness to place and land, and often other species, by indigenous peoples is not disputed. This is a quintessential feature of Australian Aboriginal cultural assumptions and totemic belief systems (Elkin, 1938; Berndt & Berndt, 1964; Charlesworth *et al.*, 1984; Eliade, 1987; Rowse, 1992) and is certainly the case for most Native American cultures (Versluis, 1992). The 'spiritual' nature of this cultural construction and shared meaning system in an Australian Aboriginal cultural context is, however, poorly understood by many who refer to this connection (e.g. Hamilton, 1984, 1990; Rose, 1988; Anderson, 1989; Morton, 1991; Rowse, 1993; Reser, 1994). The 'natural' environment of many Aboriginal communities can be the source of considerable fear and anxiety, in a cultural context in which malevolent beings and spirits, sorcery, causality and cosmological uncertainty are located within the natural environment. As well, what particularly characterizes Aboriginal cosmology is a pervasive anthropomorphizing of the natural world, and its dependence on human ritual and management for continuance and life itself. Finally, Aboriginal world views are inherently and ubiquitously social as well as human; while it is true that there is often an almost literal identification with place, for example, through conception linearity, this identification is perhaps more accurately understood as an ontological and kinship marker in a pervasively social landscape of meaning.

This socially constructed character of culturally shared understandings of people-land connections is not a recent 'constructivist' notion (Eliade, 1959; Kluckhohn & Strodtbeck, 1961) and it certainly applies to Australian Aboriginal cultures.

. . . we are as yet only beginning to understand that

people's intimacy with the 'natural' world is not itself somehow 'natural'. Scholars such as Jane Goodale and Rhys Jones have shown with considerable sophistication that intimacy is achieved through *cultural constructions of the environment* based on close observations accumulated through time. There is a great deal to be learnt about 'the facts' that Aboriginal people have observed, and more to be learnt from their managerial strategies. There is even more to be learnt of the *cultural construction of the environment*, for it is through moral and ontological systems that Aboriginal people have achieved and sustained their skilled ecological management strategies (Rose, 1988, p. 384).

A Focus on Self: The real work

Much of ecopsychology writing is about direct action and social change. The nature and magnitude of global environmental problems requires a radical, political, social change agenda. This is made very clear in the 'Deep Ecology' literature, which is a call for new tactics as well as a new way of thinking about effective individual and societal change. What is fascinating is the remarkably clear-eyed focus on self as change target and agent.

We need a way to view the self, a new experience of our place in the whole, to develop true ecological responsibility. In the course I teach at the Center, we are exploring ways to develop a more connected, creative, ecological experience of the self through readings in deep ecology and the development of ecological identity (Conn, 1992, p. 5).

The terminology may be different, and the database is largely experiential, but there is a serious attempt to critically view the nature and dynamic of self systems, and how self and world encounters can substantively change self construction and behaviour. The *real work* is working on ourselves; direct action and political change logically and appropriately follow. There is considerable reference in the deep ecology literature to personal experience and transformation, typically in the context of natural environment or workshop-mediated encounter.

Part of the problem—and part of the promise—derives from the fact that ecopsychologists are arguing from their own and others' *experience* of 'connecting', of being in touch with the planet, of feeling earth's pain, hearing earth's cries. 'Moreover, deep ecology has become a 'practice' aimed at directly *experiencing* connectedness with nature' (Callicott, 1983, p. 4). This is, from a critical perspective, a naive phenomenology which gives primacy to direct experience at the expense of a more objective account of the nature of such experiences. It is interesting to note that separation and connection

were intertwined themes in early psychoanalytic cultural discourse, just as they were an integral strand of romanticism and transcendentalism.

the oceanic feeling was a sensation of the individual's identity with his surroundings, of his sublime connection to objects, to one's entire self, and to the universe as an indivisible whole (Fisher, 1991, p. 112).

Such privileging of the experiential is understandable, and indeed constitutes a powerful tool of behaviour change, but it does totally disregard the complexity of self-schemas, self-awareness, and self-attributions following behaviour change, and the multiplicity of ways in which our construction of reality is adroitly manipulated in service of self-related information processing needs.

There appears to be little understanding that the exercise in critical self-reflection on self, culture, the environmental crisis, and psychology has been occurring on a much wider front than ecopsychology (Harre, 1984; Gergen & Davis, 1985; Parker, 1989; Shotter & Gergen, 1989; Sampson, 1989, 1993; Parker & Shotter, 1990; Stigler *et al.*, 1990; Shweder, 1991; Kvale, 1992). One might hazard that this is because ecopsychologists are coming from a more clinical, psychiatric, and culture-bound frame of reference. This, however, raises a further and perhaps more challenging conflict than that between Western individualism and ecological self. The cross-cultural evidence clearly suggests that Western individualism is a cultural anomaly and that while self construction varies enormously around the globe, it is typically more collective or interdependent (Heelas & Lock, 1981; Geertz, 1983; Markus & Kitayama, 1990; Stigler *et al.*, 1990). Even in the cultural context of North America, it is axiomatic that attitudinal change must take into account the normative, social context of change, and that differences between individualism and collectivism across cultures must be understood to exist at individual difference and collective levels, for example the 'enssembled individualism' of the East (Sampson, 1988). What are the behaviour change implications at a global level when cultural constructions and experience of self are so diverse—and different—from the western cultural assumptions undergirding ecopsychology?

What does Ecopsychology have to Offer to Interested Psychologists, Particularly Environmental Psychologists?

There are many things that come to mind here. A

number of particularly valuable touchstones, like eco-relevance; a temporal, biological, multi-disciplinary, cultural perspective; human *experience*; the primacy of feelings; the need to focus and channel *individual* energies and competencies for effective and enduring change; and, most importantly, the magnitude and critical nature of the task. There is as well something that goes beyond the self-evident caring and concern that characterize the ecopsychology movement—there is a consciousness of the *past*, the *future*, and the *nature*—and *meaning*—of *human connections* in this greater web of life. This is of immense value to a discipline which is ostensibly concerned with the *human* condition and the *quality* of human experience. There are, in short, some very valuable and challenging possibilities here, in terms of moving people toward more ecologically sensitive behaviours and policies, in terms of how we construct human and ecosystem interconnections, in terms of how we construct psychology as well as self. On a more practical and positive level, ecopsychology is, intentionally or not, throwing out a challenge to psychology as a discipline and profession to get involved with 'the real work', in Gary Snyder's words:

what we really do. And what our lives are. To make the world as real as it is and to *find ourselves* as real as we are *within it* (1980, p. 81).

What does Psychology Have to Offer to Ecopsychology?

Psychology has clearly impacted on the ecopsychology movement, albeit largely unintentionally and inadvertently. There is an obvious and strong psychoanalytic and analytic character to discussions of separation, anxiety, conflict, and unconscious, often interwoven with the critical theory of postmodernism and feminism. Perhaps the next most important contributions have been the experiential, self-reflective and critical perspectives of humanistic psychology, and the 'how to bring about effective individual and group change' perspectives of Lewinian social psychology (1947) and community psychology (e.g. Orford, 1992). These domains of individual growth, self and other consciousness, and effective change strategies have percolated through popular culture and institutions to the point where they substantially inform our ways of thinking and problem-solving. The awareness level with respect to social and environmental psychology in the ecopsychology discourse, however, is virtually nonexistent. Sadly, the substantive con-

tribution of environmental psychology to the environmental social problem arena has been very modest, with some exceptions, e.g., social dilemmas, risk assessment, and behavioural perspectives on energy and water conservation and littering, and these areas of research and application are not widely known. To be fair these latter areas are of major importance, but as Einstein notes, they have not changed the way we think—and this is ultimately what is required (Zimmerman, 1985; Zimbardo & Leippe, 1991). One reads the concluding, problem-focused chapters of recent textbooks in the area (Gifford, 1987; Bell *et al.*, 1990; McAndrew, 1993) with some dismay, and a realization that the enormity and critical status of the global crisis has not—and perhaps cannot—galvanize the academic imagination. On the other hand, the available serial compilations of environmental psychological writings which exist, for example, the *Human Behaviour and Environment* Series (Plenum) are of particular value.

What psychology can offer are ways of framing issues of central interest and concern to ecopsychologists and a substantial and relevant corpus of research evidence. The nature, status and importance of self is a good example. While one can only be impressed by the way in which a changing-the-self focus characterises the ecopsychology literature, there appears to be no clear conceptual framework which informs the reader as to how and why such strategies work, how it is that changing the self changes everything else. Psychology is in a position to offer some clear wisdom as well as research findings here, deriving from attitude and behaviour research (e.g. Eagley & Chaiken, 1993) and social cognition (e.g. Fiske & Taylor, 1991), as well as from personality theory (e.g. Carver & Scheier, 1992) and the social and cross-cultural psychology of 'self' (e.g. Gergen & Davis, 1985; Shotter & Gergen, 1989).

Ecopsychology's focus on self, while aligned with psychotherapy as well as the human potential movement, is very compatible with the Lewinian tradition of change from within, and the use of small groups and communities as agents of change (e.g. Sampson, 1976; Bargal *et al.*, 1992). There are a number of other aspects of this focus on self-understanding that are very sympathetic with a more contemporary social cognition understanding of 'self' (Epstein, 1972; Markus & Wurf, 1987; Fiske & Taylor, 1991). The multiple self-schemas posited by Gergen (1982) and Markus and Nurius (1986) suggest a number of options in terms of domain-specific salience and 'possible selves'. Recent social psychological research on attitude

change in an environmental context is suggesting, contrary to the assumptions of paradigmatic models (e.g. Ajzen & Fishbein, 1988), that self-identity independently and powerfully influences behavioural intentions, and possibly makes salient particular ethical and emotional orientations (e.g. Biddle *et al.*, 1987; Charng *et al.*, 1988; Sparks & Shepherd, 1992). The more classic attitude change works on ego involvement and value relevance (e.g. Katz, 1960; Ostrom & Brock, 1968; Johnson & Eagley, 1989, 1990) remain relatively unexplored but very promising avenues for better understanding the interrelationships between self and environmental perceptions (Zimbardo & Leippe, 1991; Eagley & Chaiken, 1993). It is quite possible that environmental 'concern' is in fact a functionally interdependent composite of self-involvement and value salience. The record of behavioural intervention is impressive (e.g. Geller, 1987; Dwyer *et al.*, 1993); even here the possibilities of self-construction are receiving serious consideration, not only with respect to self-regulation and self efficacy but also including 'the processes by which "environmental ethics" become internalized so as to produce lifelong behaviours . . . Only then can behaviour science meaningfully contribute to saving planet earth' (Dwyer *et al.*, 1993, p. 317, p. 319). Finally, framing the issue in terms of social constructions (Gergen, 1985), social problem construction (Schneider, 1985; Hilgartner & Bosk, 1988) or social representations (von Cranach *et al.*, 1992; Farr, 1993) would open the door to some different and useful concepts and research avenues. The social representation of the nature of the 'connection' between 'person' and 'natural environment' is an obvious candidate for serious investigation, as are the social representations of 'psychology' and 'ecopsychology'.

While considerable store is being placed by ecopsychologists on small group and community-level processes, there appears to be no articulated wisdom with respect to how and why such groups can be such powerful facilitators of enduring change. Again, psychology is in a real position to offer valuable and useful wisdom here with respect to facilitating change from within, and using—not fighting—group sanctions and norms (e.g. O'Keefe, 1990). Social comparison and normative conduct have long been held to mediate environmentally responsible behaviour; recent research reviews underscore the importance but multiplicity and situational specificity of such norms (Cialdini *et al.*, 1991).

It is clear that one of the dynamics of change at an individual and collective level has to do with

changing social representations and belief systems, with changing values and priorities, in a post-modern context of massive cultural change and political and ideological flux. A social and political psychological perspective is of enormous value here, and while it can only complement the perceptive insight of historians such as Roszak, it offers clear conceptual links between individual and collectivity, between attitudes, beliefs, and cultural assumptions. An excellent example of how a more classic attitude change model is squarely addressing issues of genuine behaviour change is found in Ajzen's extended model of reasoned action, the theory of planned behaviour (Ajzen & Fishbein, 1984; Ajzen, 1991). In addition to intentions and subjective norms, the theory builds in both actual and perceived behavioural control. Clearly, beliefs about control are central to the concerns of ecopsychology as well as to applied social psychology. There is also reasonable prospect that the ubiquitous issue of information knowledge can be better understood in terms of information integration theory (Anderson, 1991), which separately weights meaning and relevance in the valuation of incoming information, and underscores the processes by which information becomes integrated with what we already know and value. If psychology is going to make a genuine contribution to changing how people think—about the environment or human nature—they are going to have to address squarely such conceptually vexing issues as values and beliefs and the nature of concern, and very different cultural assumptions about human-biosphere interdependencies (Stern & Oskamp, 1987; Schwartz *et al.*, 1992; Stern, 1992) and how these relate to cultural meaning systems and social change (Saegert, 1987; Bruner, 1990; Sloan, 1990; Shweder, 1991).

It is noteworthy that references to environmental threats in the ecopsychology literature are largely in the context of anxiety, fear and 'psychic numbing'. This is the discourse of the antiwar movement, and it is noteworthy that many ecopsychologists were central figures in this movement and wrote extensively on human response to the nuclear threat, for example, Johanna Macy and John Mack. There also exists a focused psychological literature addressing the psychological aspects of nuclear war (e.g. Thompson, 1985), though what was never adequately dealt with were the psychological consequence of living under the shadow of nuclear war, the psychological 'reality' of such a scenario, or the motivational or behaviour change implications of the nuclear threat (Reser, 1980). There is much of value in the now extensive literature on human

response to environmental threat (e.g. Fischhoff *et al.*, 1987; Cvetkovich & Earle, 1992) and the fundamental issue of future orientation and psychological representation (Kaplan, 1972; Reser & Smithson, 1988; Ornstein & Ehrlich, 1990). One might also well mention what cumulative wisdom we have with respect such phenomenon as learned helplessness, desensitization, burnout, risk assessment and decision-making, conflict resolution, and coping. These overlapping literatures are, of course, extensive. Unfortunately, we do not have a clear conceptual model or measurement tool for 'environmental concern', which could arguably be ecological, altruistic, egoistic or religious/ideological. How these concern orientations toward the environment are acquired and transmitted may be a critical factor and proximate cause in determining the pace of global environmental change (Stern, 1992; Stern *et al.*, 1993).

A particularly valuable perspective from environmental psychology is the psychology of place and place identity (e.g. Kaplan & Kaplan, 1978; Altman & Werner, 1985; Altman & Low, 1992). Over the past two decades there has been a sporadic and interdisciplinary attempt to understand better the meaning and symbolic character of place attachment (Rainwater, 1966; Relph, 1966; Tuan, 1974, 1977; Cooper, 1976; Proshansky, 1978; Rapoport, 1982; Proshansky *et al.*, 1983). This has ranged from the writings of naturalists (Leopold, 1949; Shepard, 1973), to the literary genre wherein the exploration of self and a particular natural setting are interwoven (Dillard, 1975; Mathieson, 1978; Lopez, 1979; McPhee, 1979; Snyder, 1986; Berry, 1990), to dislocations of self when moving or made homeless (Hormuth, 1990; Goehring & Stager, 1991), to more anthropological accounts of place meaning and identity (Brody, 1983; Benterrak *et al.*, 1984). The area of cultural studies has offered some particularly valuable perspectives on culturally reproduced landscapes of meaning, and the contemporary wedding of local to global, temporal to spatial, and personal to collectivity in an infinite variety of cultural and geographic juxtapositions (Williams, 1981; Hall, 1990; Shore, 1991; Grossberg *et al.*, 1992; Massey, 1993). This self-reflective world of images and representations, and changing identities, values, and cultural meaning systems is in many ways central to the concerns of ecopsychology.

The front page news was particularly vivid on 24 March 1989. It conveyed the signs that launched a thousand ships of associations, or a thousand thousand gallons of crude oil into the crystalline mind of Prince William's Sound. 'It's a sign of the times', it's

in the *Times*. The unconscious collected images of dying otters, oil-slicked fish eggs and infinite blackened rocks and beach pebbles. The signs turned into sings and their meanings became unclear; like discordant melodies that never end, never stop long enough to be examined or analyzed. Signifiers rose above signifieds and floated across the surface of our skin until they settled like leaves on a pond and made their descent into our bodies and murky dreams. Inside our bodies suffering otters turned into painful utters, the body is a cavern vulnerable to pollution and helplessness (Bluhm, 1992, pp. 2391-392).

The more psychological of these explorations of place meaning (Kaplan, 1978; Csikszentmihalyi & Rochberg-Halton, 1981; Proshansky *et al.*, 1983; Hormuth, 1990; Altman & Low, 1992; Lalli, 1992; Matthews, 1992; Mazumdar & Mazumdar, 1993) have clearly demonstrated that connections to dwelling, neighbourhood, and local ecosystem are an integral component of identity, environmental quality and 'environmental competence' (Gifford, 1987). The work on house symbolism is of particular relevance to an understanding of how 'body' and 'dwelling' have become metaphors for the earth itself (Synder, 1969, 1986; Cooper, 1976; Marcus, 1990). These perspectives in many ways mine James' notion of the 'material self' as well as suggest that how we frame and experience our relationship to our lived environment determines the architectural, social and linguistic forms we employ to articulate this relationship, actually and metaphorically. This in turn determines our experience and shapes our lives (Hall, 1966; Bell *et al.*, 1990). More recent work on place identity (Lalli, 1992) argues that place identity must be specified with respect to particular spatial-psychological areas, such as one's home town or city, as a necessary condition for meaningful empirical investigation, and that two experience-based processes have to be included in any psychologically meaningful scale, individual behavioural involvement in an environment and the shared social construction of this environment. Giuliani and Feldman (1993) further argue that place attachment, while invaluable as a heuristic, and a valuable consideration with respect to environmental meaning and transactions, has not really provided much analytic clarity as to the nature and dynamic of this bonding process, nor how it differs from related phenomena, e.g. rootedness, homesickness.

The insight for ecopsychology is perhaps that connecting with the planet must also, somehow, take place at a local level, and that attachment, meaning and identity, while of core importance, are related to behaviour in complex ways which are not necess-

arily elucidated by psychoanalytic or Jungian exegesis. The impact of the ecological crisis and motivational imperatives may need to be *experienced* at a local level and must *register* on one's cognitive, emotional, and personal map of the world (Seamon & Mugerauer, 1985; Reser & Smithson, 1988; Ornstein & Ehrlich, 1990). This emphasis on the importance of 'connecting' with one's local, known, traversed, natural environment is a recurrent theme in the 'natural history' literature which undergirds ecopsychology sentiments (e.g. Synder, 1986, 1990; Berry, 1988, 1990). The necessary caveat here is that locally 'connected' selves or 'bioregional personal narratives' run the danger of local self-interest and the 'blood and soil' morality that has haunted deep ecology ethical consideration (e.g. Cheney, 1989; Michael, 1992).

It is unfortunate that there is such little reference in the ecopsychology literature to either environmental psychology or contemporary social psychological perspectives on the self. This suggests an unfortunately narrow understanding of applied social science as contrasted with more psychoanalytic and psychiatric formulations. Ecopsychologists might be surprised at what concerned social and environmental psychologists have to say about environmental issues.

Clearly social influence techniques can be applied to changing the environmental behaviours of individuals. But what about the environmentally destructive behaviours that occur to sustain the global economic system? What about the pollution and destruction caused by the ways we produce, distribute, and consume goods? ... it is the big environmental problems that are most prone to out-of-sight, out-of-mind mentality. ... The solution to what many believe is a global environmental crisis rests in passionately nurturing pro-environmental attitudes and beliefs throughout the culture. Future executives and political leaders must be environmentalists through and through. This is a very hard task, but it can be done. There is evidence that educational programmes beginning in early childhood that 'immerse' students in environmental consciousness-raising may lead to pro-environment attitudes that people are willing to act on. This involves more than an 'ecology section' of a science course. Children must directly experience nature under the guidance of teachers who can reveal its beauties and teach the consequences of environmental abuse in enough vivid detail to create a sharp contrast with this beauty. The ecology 'out there' must get internalised as starting 'in here', within each of us (Zimbardo & Leippe, 1991, pp. 339-340).

Psychology is relevant to global environmental change because the current changes are largely anthropogenic in origin. ... The role of social and behavioural science in the global-change research

agenda is to improve understanding of how human systems produce the proximate causes, how changes in human systems might change the rate at which people alter the environment, how people perceive changes in the global environment, how people respond to the anticipation of global environmental change and are affected by experienced change, and how changes in the human systems might make people less susceptible to the effects of global environmental change. The role of psychology is to improve the understanding of the function of individual and interpersonal behaviour in all of these human-environment relationships (Stern, 1992, p. 271, p 272).

Concluding Observations

It is difficult to know whether environmental psychology will take a turning at the transpersonal ecopsychology crossroads. Those psychologists who are genuinely involved in the environmental/conservation movement may well move in a more political direction. This may or may not involve psychology as a discipline. Those who are particularly interested in self and self-environment constructions may pursue these interests in a personality or clinical area, or find sustenance in the reconstituted areas of social/personality or cultural psychology. There is a very useful role for social psychologists in documenting this social movement, in documenting the changing social construction of people-planet interrelationships and the 'indigenous psychology' and postmodern underpinnings of this changing societal consciousness. Gardner (1992) suggests that social psychology itself may become a part of the broader field of cultural studies. While environmental psychology has yet to situate itself in this discourse and find a voice, Michael's analysis (1992) of the role of the 'natural' in the constitution of a postmodern identity provides an intriguing prospectus with respect to where a social psychology of postmodernism might take us in the environmental arena and with respect to a marriage of social and biological science (Caporeal & Brewer, 1991). Many humanistic psychologists will continue to explore attachment metaphors with respect to person-planet constructions, and psychotherapy may increasingly address ecosystem anxieties. Hopefully the more encompassing, multidisciplinary, ecological and ecosystem approaches which have been suggested (e.g. Stern, 1992; Stokols, 1992) will succeed in marrying applied wisdom to critical problems.

Should psychology, *can* environmental psychology, embrace the agenda and concerns of ecopsychology? It is worth coming back to Roszak's own objectives with respect to ecopsychology:

My effort has been to connect as tightly as possible with psychology, especially professional psychology in order to bring its great public influence into the service of the environmental movement. I have tried to use references to the 'spiritual' sparingly; the term creates awkward, New Age connotations in the United States and might take off in odd, sectarian directions. Since my goal is to bring ecopsychology into the mainstream, I have been trying to cleave to psychology rather than spirituality. I admit this is, at a certain point, a matter of arbitrary rhetoric; I personally find the psychological blends into the spiritual along an extensive frontier. But for the purposes of public outreach, I find psychotherapy easier to work with. (Personal correspondence, September, 1993.)

Roszak has also strongly endorsed the need for programmes of ecopsychological studies and educational outreach programmes for practising professionals, especially psychologists and environmentalists. The rationale for such programmes, according to Roszak, 'includes the absence at any psychology curricula that include an introduction to the environmental sciences adapted to the professional needs of psychotherapists', and the absence of 'curricula in environmental studies that include a basic understanding of human motivations, addiction of psychotherapy' (proposed Programme for Ecopsychological Studies).

Ecopsychologists have clearly understood that effective and enduring change comes from within—but this must come from within communities and societies as well as individuals. They would also appear to be effectively using group processes and norms, and public commitment, to move attitudes, beliefs, and values in the direction of ecological concern. They have not understood well, however, that there exists considerable wisdom with respect to individual and social change within social psychology, as well as psychotherapy, and that self schemas, self constructions and self encounter are as central to their enterprise as is sensitivity training with respect to the natural environment and ecosystem threats. There is also, ironically, a very individualistic character to discussions of the ecological self in terms of psychoanalytic assumptions, ultimate self-interest, psychotherapy as behaviour change intervention, and self actualization via environmental action (e.g. Daniels, 1988; Bradford, 1993). A number of social and cross-cultural psychologists have been arguing for some time that psychology needs a new concept of self, a global, postmodern self that dovetails with postmodern social reality and individual experience (Sampson, 1989; Gergen, 1991, 1992).

The discourse on ecopsychology would seem, at

points, to be underscoring a more interdependent, collectivist sense of self, though there is an evident tension with the more individualist set of premises on which this quasi-psychiatric model is based. It is unfortunate that there is so little reference to cross-cultural psychological discussions of interdependent versus individualistic selves (Markus & Kitayama, 1990; Triandis, 1990; Oyserman, 1993), and the role of culture in constructing such self representations and self-environment interdependencies (Shweder & LeVine, 1984; Sampson, 1989; Bruner, 1990). To pursue a political and behaviour change agenda without reference to this merging understanding of the motivational and personal responsibility dynamics of culturally embedded self construal is self-handicapping and remarkably remiss. Western culture itself is and has been undergoing profound changes, one of the most important of these changes being with respect to cultural constructions of self and personhood (Gergen & Davis, 1985; Shotter & Gergen, 1989). At the same time that there is a crescendo call for psychology to come up with new theoretical understandings of personhood which have some construct validity with respect to where contemporary society is at (Sampson, 1989, 1993), ecopsychologists are attempting to refashion 'self' and society on the basis of rather tired constructions of self which may no longer map onto any meaningful social reality or subjective experience. The hope is that a truly ecological self construction will meaningfully incorporate the individual and cultural 'other' as well as the ecosphere. This may require the jettisoning of considerable baggage.

From a conventional psychological perspective what is needed is a cogent analysis of how individual behaviour interfaces with global and localized environmental problems, and an adequate, multilevel assessment of the determinants of individual and collective behaviour. Such analyses have been recently attempted (e.g. Stern & Oskamp, 1987; Stern, 1992; Stern *et al.*, 1993) and allow for a more meaningful consideration of the nature and role of self-construal, and how this in turn influences beliefs, values, and ultimately ecosystem concern and individual behaviour. It is, of course, probable that culturally produced and shared understandings of self and personhood substantially influence collective behaviours and in turn influence self-construction (Gergen, 1991). Indeed the biggest challenge is probably to understand better the cultural landscapes of meaning and the politics of space, race and planet which increasingly inform the discourse of culture theorists (e.g. Berland, 1992;

Massey, 1993). This reflective and critical consideration of culture and cultural understandings is at the heart of culture theory, cultural studies, and cultural psychology. It is noteworthy in this regard that the most frequent and current reference made by ecopsychologists to more encompassing cultural assumptions and understandings is Freud's reflections on human nature and human destiny in *Civilization and Its Discontents* (e.g. Roszak, 1992, 1993). Howard notes, in his review of *The Voice of the Earth* (1993), that while there is much to admire in the book, the case Roszak makes for the pervasive ecopathology of the human spirit is premised almost exclusively on Freudian and neo-Freudian sources, straining the resonance of an otherwise sympathetic readership. This, and the unqualified anti-positivist, often anti-psychological stance of ecopsychology generally does not augur well for a meeting of minds and purpose.

Can environmental psychology, qua psychology, encompass ecopsychology—as social movement, societal conscience, and therapeutic behaviour change intervention? Probably, and sadly, not, for many of the reasons canvassed in this paper. If environmental psychologists do not consider and address the spectrum of issues raised by ecopsychologists, however, seriously and urgently, they will have truly lost their way as well as their credibility. While I continue to have some problems with ecopsychology as a lucid, convincing and useful conceptual platform, I have no problem with their mission statement or passionate concern.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, **50**, 179–211.
- Ajzen, I. & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Albrecht, S. L. (1976). Legacy of the environmental movement. *Environment and Behavior*, **8**, 147–168.
- Altman, I. & Christensen, K. (Eds) (1990). *Human Behaviour and Environment, Vol. 11. Environment and Behavior Studies: Emergence of intellectual traditions*. New York: Plenum Press.
- Altman, I. & Low, M. (Eds) (1992). *Human Behaviour and Environment, Vol. 12. Place attachment*. New York: Plenum Press.
- Altman, I. & Werner, C. M. (1985). *Human Behaviour and Environment, Vol. 8. Home environments*. New York: Plenum Press.
- Alvard, M. S. (1993). Testing the 'ecologically noble savage' hypothesis: interspecific prey choice by Piro hunters of Amazonian Peru. *Human Ecology*, **21**, 355–387.
- Anderson, C. (1989). Aborigines and conservationism: the Daintree-Bloomfield road. *Australian Journal of Social Issues*, **24**, 214–227.
- Anderson, N. H. (Ed.) (1991). *Contributions to information integration theory* (Vols 1, 2, & 3). Hillsdale, NJ: Erlbaum.
- Arkes, H. R. & Garske, J. P. (1982). *Psychological Theories of Human Motivation* (2nd Edn.) Monterey: Brooks/Cole.
- Atkinson, J. M. (1992). Shamanisms today. *Annual Review of Anthropology*, **21**, 307–330.
- Bargal, D., Gold, M. & Lewin, M. (Eds) (1992). The heritage of Kurt Lewin: theory, research and practice. *Journal of Social Issues*, **48**, 1–206.
- Barker, R. G. (1968). *Ecological Psychology*. Stanford: Stanford University Press.
- Barrow, J. D. & Tipler, F. J. (1986). *The Anthropic Cosmological Principle*. Oxford: Oxford University Press.
- Bell, P. A., Fisher, J. D., Baum, A. & Greene, T. E. (1990). *Environmental Psychology*, (3rd Edn.) Sydney: Holt, Rinehart & Winston.
- Berland, J. (1992). Angels dancing: cultural technologies and the production of space. In L. Grossberg, C. Nelson & P. A. Treichler, Eds., *Cultural Studies*. New York: Routledge, pp. 38–65.
- Berry, T. (1988). *The Dream of the Earth*. San Francisco: Sierra Club Books.
- Bateson, G. (1972). *Steps to an Ecology of Mind*. New York: Random House.
- Bateson, G. (1972). *Mind and Nature: A necessary unity*. New York: Bantam.
- Bennett, D. (1990). Ecological sustainability, deep environmental ethics and Tao: a preliminary conjunction. Paper in the Fundamental Questions Paper Series. Canberra: Australian National University, CRES.
- Benterrak, K., Muecke, S. & Roe, P. (1984). *Reading the Country*. Freemantle: Freemantle Arts Centre Press.
- Berndt, R. M. & Berndt, C. H. (1964/1977). *The World of the First Australians*. Sydney: Ure Smith.
- Berry, T. (1988). *The Dream of the Earth*. San Francisco: Sierra Club Books.
- Berry, W. (1990). Word and flesh. *Whole Earth Review*, **66**, 68–71.
- Biddle, B. J., Bank, B. J. & Slavings, R. L. (1987). Norms, preferences, identities and retention decisions. *Social Psychology Quarterly*, **50**, 322–327.
- Bluhm, C. (1992). Where otters exist as utters: beauty, love and truth in the postmodern world. *Theory & Psychology*, **2**, 391–396.
- Boyden, S., Dovers, S. & Shirlow, M. (1990). *Our Biosphere under Threat: Ecological realities and Australia's opportunities*. Melbourne: Oxford University Press.
- Bradford, G. (1993). Toward a deep social ecology. In M. E. Zimmerman, B. Callicott, G. Sessions, K. J. Warren, & J. Clark, Eds., *Environmental Philosophy: From animal rights to radical ecology*. Englewood Cliffs: Prentice Hall, pp. 418–437.
- Brody, H. (1983). *Maps and Dreams*. Ringwood, Victoria: Penguin.
- Bruner, J. S. (1990). *Acts of Meaning*. Cambridge: Harvard University Press.
- Brunswik, E. (1956). *Perception and the Representative*

- Design of Psychological Experiments*. Berkeley: University of California Press.
- Bunyard, P. (1989). Guardians of the Amazon. *New Scientist*, **35**, 38–41.
- Buttel, F. H. (1987). New directions in environmental sociology. *Annual Review of Sociology*, **12**, 465–488.
- Callicott, J. B. (1993). Introduction: environmental ethics. In M. E. Zimmerman, B. Callicott, G. Sessions, K. J. Warren & J. Clark, Eds., *Environmental Philosophy: From animal rights to radical ecology*. Englewood Cliffs: Prentice Hall, pp. 3–11.
- Caporeal, L. R. & Brewer, M. B. (1991). *Journal of Social Issues*, **47**, 1–9.
- Carson, R. (1962). *Silent Spring*. Boston: Houghton-Mifflin.
- Carver, C. S. & Scheier, M. F. (1992). *Perspectives on Personality*, (2nd Edn) Boston. Allyn & Bacon.
- Catton, W. R., Jr. & Dunlap, R. E. (1980). A new ecological paradigm for post-exuberant sociology. *American Behavioral Scientist*, **24**, 15–47.
- Charlesworth, M., Morphy, H., Bell, D. & Maddock, K. (Eds) (1989). *Religion in Aboriginal Australia: An anthology*. St. Lucia: University of Queensland Press.
- Charng, H.-W., Piliavin, J. A. & Callero, P. L. (1988). Role identity and reasoned action in the prediction of repeated behavior. *Social Psychology Quarterly*, **51**, 303–317.
- Cheney, J. (1989). Postmodern environmental ethics: ethics as bioregional narrative. *Environmental Ethics*, **11**, 117–134.
- Cialdini, R. B., Kallgren, C. A. & Reno, R. R. (1991). A focus theory of normative conduct: a theoretical refinement and reevaluation of the role of norms in human behaviour. *Advances in Experimental Social Psychology*, **24**, 201–234.
- Cock, P. (1991). Values for sustainability: the necessity of transcendence and sacred realms. Paper in the Fundamental Questions Paper Series. Canberra: Australian National University, CRES.
- Conn, S. (1992). From information to transformation. Center for Psychology and Social Change Forum, 29 September, 1992.
- Conn, S. (1990). Protest and thrive; the relationship between personal empowerment and global responsibility. *New England Journal of Public Policy*, **6**, 163–177.
- Cooper, C. C. (1976). The house as symbol of self. In H. M. Proshansky, W. H. Ittelson & L. G. Rivlin, Eds., *Environmental Psychology: People and their physical settings*. New York: Holt: Holt, Rinehart & Winston, pp. 435–448.
- Cronon, W. (1983). *Changes in the Land: Indians, colonists, and the ecology of New England*. New York: Hill and Wang.
- Crook, J. H. (1980). *The Evolution of Human Consciousness*. Oxford: Clarendon Press.
- Csaky, M. (Ed.) (1979). *How Does it Feel?: Exploring the world of your senses*. London: Thames & Hudson.
- Csikszentmihalyi, M. & Rochberg-Halton, E. (1981). *The Meaning of Things: Domestic symbols and the self*. Cambridge: Cambridge University Press.
- Cushman, P. (1990). Why the self is empty: towards a historically situated psychology. *American Psychologist*, **45**, 599–611.
- Cvetkovich, G. & Earle, T. C. (Eds) (1992). Public responses to environmental hazards. *Journal of Social Issues*, **48**, whole issue.
- Daniels, M. (1988). The myth of self-actualization. *Journal of Humanistic Psychology*, **28**, 7–38.
- Devall, B. & Sessions, G. (1985). *Deep Ecology: Living as if nature mattered*. Salt Lake City, Utah: Gibbs M. Smith.
- Dillard, A. (1975). *Pilgrim at Tinker Creek*. New York: Bantan.
- Douglas, M. (1970). *Purity and Danger: An analysis of the concepts of pollution and taboo*. Harmondworth: Penguin.
- Dubos, R. (1972). *A God Within*. New York: Charles Scribner.
- Dunlap, R. E. & Mertig, A. G. (Eds) (1992). *American Environmentalism: The U.S. environmental movement, 1970–1990*.
- Dunlap, R. E. & Van Liere, K. D. (1978). The 'new environmental paradigm': A proposed measuring instrument and preliminary results. *Journal of Environmental Education*, **9**, 10–19.
- Dwyer, W. O., Leeming, F. C., Cobern, M. K., Porter, B. E. & Jackson, J. M. (1993). Critical review of behavioral interventions to preserve the environment. *Environment and Behavior*, **25**, 275–321.
- Eagley, A. H. & Chaiken, A. H. (1993). *The Psychology of Attitudes*. Sydney: Harcourt Brace Jovanovich.
- Elkin, A. P. (1938/1974). *The Australian Aborigines*. Sydney: Angus & Robertson.
- Eliade, M. (1959/1961). *The Sacred and the Profane: The nature of religion*. New York: Harper & Row.
- Eliade, M. (1987). *The Encyclopedia of Religion*. New York: Macmillan.
- Engel, S. (1993). Metaphors and knowledge: a review. *New Ideas in Psychology*, **11**, 273–283.
- Epstein, S. (1972). The self concept revisited: or a theory of a theory. *American Psychologist*, 301–313.
- Estes, C. P. (1992). *Women who Run with Wolves*. Sydney: Rider.
- Everett, M. (1990). Profile: Sarah A. Conn, Center Research Associate. *Center Review*, Fall. Cambridge, Maine: Center for Psychological Studies in the Nuclear Age.
- Featherstone, M., Hepworth, M. & Turner, B. S. (Eds) (1991). *The Body: Social process and cultural theory*. London: Sage.
- Farr, R. M. (1993). Common sense, science and social representations. *Public Understanding of Science*, **2**, 189–204.
- Fisher, D. J. (1991) *Psychoanalytic History and Culture*. New Brunswick, NJ: Transaction.
- Fischhoff, B., Svenson, O. & Slovic, P. (1987). Active responses to environmental hazards: Perceptions and decision making. In D. Stokols & I. Altman, Eds., *Handbook of Environmental Psychology*, Vol 1. New York: John Wiley, pp. 1089–1133.
- Fiske, S. T. & Taylor, S. E. (1991). *Social Cognition* (2nd Edn.) New York: McGraw-Hall.
- Fox, W. (1990). *Towards a Transpersonal Ecology: Developing new foundations for environmentalism*. Boston: Shambala.
- Fox, D. R. (1985). Psychology, ideology, utopia and the commons. *American Psychologist*, **40**, 48–58.
- Frank, J. D. (1968). *Sanity and Survival*. New York: Vintage.

- Gale, R. P. (1972). From sit-in to hike-in: a comparison of the civil rights and environmental movements. In W. Burch, N. Cheek and L. Taylor, Eds., *Social Behaviour, Natural Resources and the Environment*. New York: Harper and Row.
- Gardner, H. (1992). Scientific psychology: should we bury it or praise it? *New Ideas in Psychology*, **10**, 179–190.
- Geller, E. S., Winett, R. A. & Everett Geertz, C. (1983). *Local Knowledge: Further essays in interpretive anthropology*. New York: Basic Books.
- Geertz, A. W. (1990). Reflections on the study of Hopi mythology. In C. Vecsey, Ed., *Religion in Native North America*. Moscow: University of Idaho Press, pp. 119–135.
- Geller, E. S. (1987). Environmental psychology and applied behavior analysis: from strange bedfellows to a productive marriage. In D. Stokols & I. Altman, Eds., *Handbook of Environmental Psychology*. New York: Wiley, pp. 361–388.
- Gergen, K. J. (1992). The decline and fall of personality. *Psychology Today*, Nov/Dec, 59–63.
- Gergen, K. J. (1991). *The Saturated Self: Dilemmas of identity in contemporary life*. New York: Basic Books.
- Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, **40**, 266–275.
- Gergen, K. J. (1982). *Towards Transformation in Social Knowledge*. New York: Springer-Verlag.
- Gergen, K. J. & Davis, K. E. (1985). *The Social Construction of the Person*. New York: Springer-Verlag.
- Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. Boston: Houghton-Mifflin.
- Gifford, R. (1987). *Environmental Psychology*. Sydney: Allyn & Bacon.
- Gilbert, R. K. (1992). Revisiting the psychology of men: Robert Bly and the mytho-poetic movement. *Journal of Humanistic Psychology*, **32**, 41–67.
- Giuliani, M. V. & Feldman, R. (1993). Place attachment in a developmental and cultural context. *Journal of Environmental Psychology*, **13**, 267–274.
- Goehring, B. & Stager, J. K. (1991). The intrusion of industrial time and space into the Inuit lifeworld: Changing perceptions and behavior. *Environment and Behavior*, **23**, 666–679.
- Goldsmith, E. (1988). The way: an ecological worldview. *The Ecologist*, **18**, 160–185.
- Goldstein, K. (1940). *Human Nature in the Light of Psychopathology*. Cambridge: Harvard University Press.
- Goldstein, K. (1939). *The Organism*. New York: American Book Company.
- Gore, A. (1992). *Earth in the Balance: Ecology and the human spirit*. Boston: Houghton Mifflin.
- Gottlieb, R. (1993). *Forcing the Spring: The transformation of the American Environmental movement*. Island Press.
- Grossberg, L., Nelson, C. & Treichler, P. A. (Eds) (1992). *Cultural Studies*. New York: Routledge.
- Hall, E. Y. (1969). *The Hidden Dimension*. New York: Doubleday.
- Hall, S. (1990). The emergence of cultural studies and the crisis of the humanities, *October*, **53**, 11–90.
- Hamilton, A. (1984). Spoon-feeding the lizards: culture and contact in Central Australia. *Meanjin*, **43**, 363–378.
- Hamilton, A. (1990). Fear and desire: Aborigines, Asians and the national imaginary. *Australian Cultural History*, **9**, 14–35.
- Hardin, G. & Baden, J. (1977). *Managing the Commons*. San Francisco: Freeman.
- Harner, M. (1980/1990). *The Way of the Shaman*. New York: Harper/Collins.
- Harre, R. (1984). *Personal Being*. Cambridge, MA: Harvard University Press, Doubleday.
- Heelas, P. L. F. & Lock, A. J. (Eds) (1981). *Indigenous Psychologies: The anthropology of the self*. London: Academic Press.
- Hilgartner, S. & Bosk, C. L. (1988). The rise and fall of social problems: a public arenas model. *American Journal of Sociology*, **94**, 53–78.
- Hillman, J. (1975). *Revisioning Psychology*. New York: Harper & Row.
- Hillman, J. & Ventura, M. (1992). We've had a hundred years of psychotherapy and the world is getting worse. *Policy*, **6**, 163–175.
- Howard, G. S. (1993). A cry for help. *Contemporary Psychology*, **38**, 857–858.
- Hormuth, E. (1990). *The Ecology of Self: Relocation and self-concept change*. Cambridge: Cambridge University Press.
- Hultkrantz, A. (1990). A decade of progress. In C. Vecsey, Ed., *Religion in Native North America*. Moscow: University of Idaho Press, pp. 167–191.
- Johnson, B. T. & Eagley, A. H. (1989). The effects of involvement on persuasion: a meta-analysis. *Psychological Bulletin*, **106**, 290–314.
- Johnson, B. T. & Eagley, A. H. (1990). Involvement and persuasion: Types, traditions, and the evidence. *Psychological Bulletin*, **107**, 375–384.
- Johnson, M. (1987). *The Body in the Mind: The bodily basis of meaning, imagination, and reason*. Chicago: University of Chicago Press.
- Kaminsky, G. (1993). Ecological psychology's trouble with knowledge: one terrible example. In M. von Cranach, W. Doise & G. Mugny, Eds., *Social representations and the Social Bases of Knowledge*. Lewiston, New York: Hofgreffe & Huber Publishers, pp. 96–103.
- Kaplan, S. (1972). The challenge of environmental psychology: a proposal for a new functionalism. *American Psychologist*, February, 140–143.
- Kaplan, S. & Kaplan, R. (1978). *Humanscape: Environments for people*. North Scituate, MA: Duxbury Press.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, **24**, 163–204.
- Kilbourne, B. & Richardson, J. T. (1984). Psychotherapy and new religions in a pluralistic society. *American Psychologist*, **39**, 237–251.
- King, S. K. (1990). *Urban Shaman: A handbook for personal and planetary transformation based on the Hawaiian myth for the adventurer*. New York: Harper/Collins.
- Kluckhohn, F. R. & Strodtbeck, F. L. (1961). *Variations in value orientations*. Evanston, IL: Row-Peterson.
- Knudtson, P. & Suzuki, D. (1992). *Wisdom of the Elders*. St. Leonards: Allen & Unwin.
- Koch, S. (1993). 'Psychology' or 'The Psychological Studies'? *American Psychologist*, **48**, 902–904.
- Kvale, S. (Ed.) (1992). *Psychology and Postmodernism*. Newbury Park: Sage.
- Lakoff, G. & Johnson, M. (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.

- Lalli, M. (1992). Urban-related identity: theory, measurement, and empirical findings. *Journal of Environmental Psychology*, 12, 285–303.
- Leopold, A. (1949). *A Sand County Almanac*. New York: Ballantine.
- Lewin, K. (1947). Frontiers in group dynamics, I & II. *Human Relations*, 5–41, 143–153.
- Lifton, R. J. (1979). *The Broken Connection: On death and the continuity of life*. New York: Touchstone Books.
- Lifton, R. J. (1968). *Death in Life: Survivors of Hiroshima*. New York: Basic Books.
- Lock, M. (1993). Cultivating the body: anthropology and epistemologies of bodily practice and knowledge. *Annual Review of Anthropology*, 22, 133–155.
- Lopez, B. H. (1979). *River Notes*. New York: Avon.
- Lovelock, J. (1988/1990). *The Ages of Gaia: A biography of our living earth*. New York: Bantam.
- Lovelock, J. (1979). *Gaia: A new look at life on earth*. New York: Oxford University Press.
- Lovelock, J. (1972). Gaia as seen through the atmosphere. *Atmospheric Environment*, 6, 579–580.
- Mack, J. (1994). *Abduction*. New York: Scribners.
- Mack, J. (1990). Changing models of psychotherapy: from psychological conflict to human empowerment. Cambridge: Center for Psychological Studies in the Nuclear Age. Harvard Medical School at the Cambridge Hospital.
- Mack, J. (1992). Inventing a psychology of our relationship to the earth. In S. Staub & P. Green, Eds., *Psychology and Social Responsibility: Facing global challenges*. New York: New York University Press, pp. 237–247.
- Macy, J. (1983). *Despair and Personal Power in the Nuclear Age*. Philadelphia: New Society Publishers.
- Marcus, C. C. (1990). From the pragmatic to the spiritual. In I. Altman & K. Christensen, Eds., *Human Behavior and Environment, Vol. 11. Environment and Behavior Studies: Emergence of intellectual traditions*. New York: Plenum Press, pp. 111–140.
- Margulis, L. & Lovelock, J. E. (1974). Biological modulation of the earth's atmosphere. *Icarus*, 21, 471–489.
- Markus, H. & Kitayama, S. (1990). Culture and the self: implications for cognition, emotion and motivation. *Psychological Review*, 98, 224–253.
- Markus, H. & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–969.
- Markus, H. & Wurf, E. (1987). The dynamic self-concept: a social psychological perspective. In M. R. Rosenweig & L. W. Porter, Eds., *Annual Review of Psychology*, Vol 38. Palo Alto, CA: Annual Reviews, pp. 299–337.
- Massey, D. (1993). A global sense of place. In A. Grey & J. McGuigan, Eds., *Studying Culture: An introductory reader*. London: Edward Arnold, pp. 232–240.
- Mathews, F. (1991). *The Ecological Self*. London: Routledge.
- Matthews, M. H. (1992). *Making Sense of Place: Children's understanding of large-scale environments*. Hemel Hempstead: Harvester Wheatsheaf.
- Mathiessen, P. (1978). *The Snow Leopard*. New York: Viking.
- Mazumdar, S. & Mazumdar, S. (1993). Sacred space and place attachment. *Journal of Environmental Psychology*, 13, 231–242.
- McAndrew, F. T. (1983). *Environmental Psychology*. Pacific Grove: Brooks-Cole.
- McPhee, J. (1979). *Coming into the Country*. New York: Bantam.
- Michael, M. (1992). Postmodern subjects: towards a transgressive social psychology. In S. Kvale, Ed., *Psychology and Postmodernism*, Newbury Park: Sage, pp. 74–87.
- Mindell, A. (1984). *Dreambody: The body's role in revealing the self*. London: Routledge & Kegan.
- Mindell, A. (1993). *The Shaman's Body*. New York: Harper Collins.
- Morton, J. (1991). Black and white totemism: conservation, animal symbolism, and human identification in Australia. In D. B. Croft, Ed., *Australian People and Animals in Today's Dreamtime: The role of comparative psychology in the management of natural resources*. Westport, CN: Praeger, pp. 21–51.
- Myers, N. (1985). *The Gaia Atlas of Planet Management*. Sydney: Pan Books.
- Myers, N. (1990). *The Gaia Atlas of Future Worlds*. Ringwood, Victoria: Penguin.
- Naes, A. (1983). The deep ecological movement: some philosophical aspects. *Philosophical Inquiry*, 8, 10–31.
- Nash, R. (1989). *The Rights of Nature*. University of Wisconsin Press.
- O'Keefe, D. J. (1990). *Persuasion: Theory and research*. Newbury Park: Sage.
- Orford, J. (1992). *Community Psychology: Theory and practice*. New York: John Wiley.
- O'Riordan, T. (1981). *Environmentalism* (2nd Edn). London: Pion.
- Ornstein, R. (1991). *The Evolution of Human Consciousness*. New York: Simon & Schuster.
- Ornstein, R. & Ehrlich, P. (1990). *New World New Mind*. New York: Simon & Schuster.
- Ortony, A. (Ed.) (1993). *Metaphor and Thought* (2nd Edn). New York: Cambridge University Press.
- Ostrom, T. M. & Brock, T. C. (1968). A cognitive model of attitudinal involvement. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg & P. H. Tannenbaum, Eds., *Theories of Cognitive Consistency: A sourcebook*. Chicago: Rand McNally, pp. 373–383.
- Oyserman, D. (1993). The lens of personhood: viewing the self and others in a multicultural society. *Journal of Personality and Social Psychology*, 65, 993–1009.
- Parker, I. (1989). *The Crisis in Modern Social Psychology—and how to end it*. London: Routledge.
- Parker, I. & Shotter, J. (Eds) (1990). *Deconstructing Social Psychology*. London: Routledge.
- Pedler, K. (1979/1991). *The Quest for Gaia*. London: Harper Collins.
- Posey, D. (1985). Native and indigenous guidelines for new Amazonian development strategies: understanding biodiversity through ethnocology. In J. Hemming, Ed., *Change in the Amazon*. Manchester: Manchester University Press, pp. 156–181.
- Proshansky, H. M. (1978). The city and self-identity. *Environment and Behavior*, 10, 147–169.
- Proshansky, H. M., Fabian, A. K. & Kaminoff, R. (1983). Place identity: physical world socialization of the self. *Journal of Environmental Psychology*, 3, 57–83.
- Rainwater, L. (1966). Fear and house-as-haven in the

- lower class. *Journal of the American Institute of Planners*, 32, 23–31.
- Rapoport, R. N. (1993). Environmental values and the search for a global ethic. *Journal of Environmental Psychology*, 13, 173–182.
- Rapoport, A. (1982). *Meaning of the Built Environment: A non-verbal communication approach*. Beverly Hills: Sage.
- Relph, E. (1976). *Place and Placelessness*. London: Pion.
- Reser, J. P. (1994). Indigenous touchstones in the search for a global ethic: Aboriginal representations and representations of Aboriginal self-world connections. Paper presented at the Symposium on Eco-ethical Thinking in a Cross-cultural Perspective. Saarbrücken, Germany. July/August.
- Reser, J. P. (1991). Aboriginal mental health: conflicting cultural perspectives. In J. Reid & P. Tromp, Eds., *The Health of Aboriginal Australia*. Sydney: Harcourt Brace Jovanovich, pp. 218–291.
- Reser, J. P. (1980). The psychological reality of natural disasters. In J. Oliver, Ed., *Response to Disaster*. Townsville, Queensland: Centre for Disaster Studies of James Cook University.
- Reser, J. P. & Scherl, L. M. (1988). Clear and unambiguous feedback: a transactional and motivational analysis of environmental challenge and self encounter. *Journal of Environmental Psychology*, 8, 269–286.
- Reser, J. P. & Smithson, M. J. (1988). When ignorance is adaptive: not knowing about the nuclear threat. *Knowledge in Society*, 1, 7–27.
- Riddington, R. (1988). Knowledge, power, and the individual in subarctic hunting societies. *American Anthropologist*, 90, 98–110.
- Robbins, T. & Anthony, D. (1978). New religious movements and the social system; integration, disintegration and transformation. *The Annual Review of the Social Sciences of Religion*, 2, 1–27.
- Rose, D. B. (1992). *Dingo Makes me Human: Life and land in an Aboriginal Australian culture*. Cambridge: Cambridge University Press.
- Rose, D. B. (1988). Exploring an Aboriginal land ethic. *Meanjin*, 3, 378–387.
- Roszak, T. (1993). Beyond the reality principle. *Sierra*, March, 59–80.
- Roszak, T. (1992a). *The Voice of the Earth: An exploration of ecopsychology*. New York: Simon & Schuster.
- Roszak, T. (1992b). The voice of the earth. *Noetic Sciences Review*, Summer, 15–18.
- Roszak, T. (1979). *Person/Planet*. New York: Doubleday.
- Roszak, T. (1969). *The Making of a Counterculture*. Garden City, NY: Doubleday.
- Rowse, T. (1993). *After Mabo: Interpreting indigenous traditions*. Melbourne: Melbourne University Press.
- Saegert, S. (1987). Environmental psychology and social change. In D. Stokols & I. Altman, Eds., *Handbook of Environmental Psychology*, Vol 1. New York: John Wiley, pp. 99–128.
- Sampson, E. E. (1993). Identity politics: challenges to psychology's understanding. *American Psychologist*, 48, 1219–1230.
- Sampson, E. E. (1988). Indigenous psychologies of the individual and their role in personal and social functioning. *American Psychologist*, 43, 15–22.
- Sampson, E. E. (1989). The challenge of social change for psychology: globalization and psychology's theory of the person. *American Psychologist*, 33, 914–921.
- Sampson, E. E. (1976). *Social Psychology and Contemporary Society*. New York: John Wiley.
- Samuels, M. D. & Bennett, H. Z. (1983). *Well Body, Well Earth: The Sierra Club environmental health sourcebook*. San Francisco: Sierra Club Books.
- Schutz, W. (1967). *Joy*. New York: Grove Press.
- Scott, S. & Morgan, D. (1993). *Body Matters: Essays on the sociology of the body*. London: The Falmer Press.
- Schneider, J. W. (1985). Social problems: the constructionist view. *Annual Review of Sociology*, 11, 209–229.
- Schwartz, S. H., Roccas, S. & Sagiv, L. (1992). Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1–65.
- Seamon, D. & Mugerauer, R. (Eds) (1985). *Dwelling, Place and Environment: Toward a phenomenology of person and world*. Boston: Dordrecht.
- Seed, J., Macy, J., Fleming, P. & Naess, A. (1988). *Thinking Like a Mountain: Towards a council of all beings*. Philadelphia, PA: New Society Publishers.
- Semin, G. R. & Rubini, M. (1992). Examining the cultural constitution of the category of the person. In M. von Cranach, W. Doise & G. Mugny, Eds., *Social Representations and the Social Bases of Knowledge*. Lewiston, New York: Hofgreffe & Huber Publishers, pp. 189–193.
- Shaffer, J. B. P. (1978). *Humanistic Psychology*. Englewood Cliffs, NJ: Prentice-Hall.
- Shepard, P. (1982). *Nature and Madness*. San Francisco: Sierra Club Books.
- Shepard, P. (1973). *The Tender Carnivore and the Sacred Game*. New York: Charles Scribner's Sons.
- Shore, B. (1991). Twice-born, once conceived: meaning construction and cultural cognition. *American Anthropologist*, 93, 9–27.
- Shotter, J. & Gergen, K. J. (Eds) (1989). *Texts of Identity*. Newbury Park: Sage.
- Shweder, R. A. (1991). *Thinking through Cultures*. Cambridge, MA: Harvard University Press.
- Shweder, R. A. & LeVine, R. A. (Eds) (1984). *Culture Theory: Essays on mind, self and emotion*. New York: Cambridge University Press.
- Sloan, T. S. (1990). Psychology for the third world? *Journal of Social Issues*, 46, 1–20.
- Snyder, G. (1990). *The Practice of the Wild*. San Francisco: North Point Press.
- Snyder, G. (1969). Good, wild, sacred. In A. Kleiner, & S. Brand, Eds., *Ten Years of Co-evolution Quarterly*. San Francisco: Northpoint Press.
- Snyder, G. (1980). *The Real Work*. New York: New Directions.
- Snyder, G. (1986). *Earth House Hold*. New York: New Directions.
- Sparks, P. & Shepherd, R. (1992). Self-identity and the theory of planned behavior: assessing the role of identification with 'green consumerism'. *Social Psychology Quarterly*, 55, 388–399.
- Stallings, R. A. (1973). Patterns of belief in social movements: clarifications from an analysis of environmental groups. *The Sociological Quarterly*, 14, 465–480.
- Staub, S. & Green, P. (Eds) (1993). *Psychology and Social Responsibility*. New York: New York University Press.

- Stern, P. C. & Oskamp, S. (1987). Managing scarce environmental resources. In D. Stokols & I. Altman, Eds., *Handbook of Environmental Psychology*, Vol. 2. New York: Wiley, pp. 1043–1088.
- Stern, P. C. (1992). Psychological dimensions of global environmental change. *Annual Review of Psychology*, **43**, 269–302.
- Stern, P. C., Dietz, T. & Kalof, L. (1993). Value orientations, gender, and environmental concern. *Environment and Behavior*, **25**, 322–348.
- Stigler, J. W., Shweder, R. A. & Herdt, G. (Eds) (1990). *Cultural Psychology: Essays on comparative human development*. Cambridge: Cambridge University Press.
- Stokols, D. (1992). Establishing and maintaining healthy environments: toward a social ecology of health promotion. *American Psychologist*, **47**, 6–22.
- Stone, C. D. (1987). *Earth and Other Ethics: The case for moral pluralism*. New York: Harper & Row.
- Storm, H. (1972). *Seven Arrows*. New York: Ballantine.
- Suzuki, D. (1993). *Time to Change*. St. Leonards: Allen & Unwin.
- Thomas, L. (1985). In N. Myers, Ed. *The Gaia Atlas of Planet Management*. Sydney: Pan Books, p. 258.
- Thompson, J. (1985). *Psychological Aspects of Nuclear War*. Leicester: British Psychological Society.
- Triandis, H. C. (1990). Cross-cultural studies of individualism and collectivism. In J. J. Berman, Ed., *Cross-Cultural Perspectives: Nebraska symposium on motivation*. Lincoln, Nebraska: University of Nebraska Press, pp. 41–133.
- Tuan, Y. T. (1977). *Space and Place: The perspective of experience*. St. Paul, MN: The University of Minnesota Press.
- Tuan, Y. F. (1974). *Topophilia: A study of environmental perception, attitudes and values*. Englewood Cliffs: Prentice-Hall.
- van der Geest, S. & Whyte, S. R. (1989). The charm of medicines: metaphors and metonyms. *Medical Anthropology Quarterly*, **3**, 345–367.
- Versluis, V. (1992). *Sacred Earth: The spiritual landscape of Native America*. Rochester, Vermont: Inner Traditions.
- Villoldo, A. & Jendressen, E. (1990). *The Four Winds: A shaman's odyssey into the Amazon*. New York: Harper and Row.
- von Cranach, M., Doise, W. & Mugny, G. (1992). *Social representations and the social bases of knowledge*. New York: Hogrefe & Huber Publishers.
- Walsh, R. (1989). Towards a psychology of human survival: psychological approaches to contemporary human threats. *American Journal of Psychotherapy*, **XLIII**, 158–180.
- Weatherford, J. (1988). *Indian Givers: How the Indians of the Americas transformed the world*. New York: Crown Publishers.
- White, L. (1973). The historical roots of our ecological crisis. In I. G. Williams, R. (1989), Ed., *The Politics of Modernism: Against the new Conformists*. London: Verso, pp. 18–30.
- Yoshinori, T. (Ed.) (1993). *Buddhist Spirituality*. New York: Crossroad.
- Zimbardo, P. G. & Leippe, M. R. (1991). *The Psychology of Attitude Change and Social Influence*. New York: McGraw-Hill.
- Zimmerman, M. E., Callicot, B., Sessions, G., Warren, K. J. & Clark, J. (1993). *Environmental Philosophy: From animal rights to radical ecology*. Englewood Cliffs: Prentice Hall.
- Zimmerman, M. E. (1985). In D. Seamon & R. Mugerauer, Eds., *Dwelling, Place and Environment*. Boston: Dordrecht.