

The Nonhuman in Human Psychological Development

by Andy Fisher

This essay is edited from a larger paper entitled "A Critique of Developmental Psychology in Light of the Ecological Crisis." The central thesis of the original paper is that psychologists and environmentalists are both engaged in different aspects of the same over-arching human dilemma. This dilemma has at its core a human subject who feels alien, anxious, and uncertain, and who is thus experiencing a crisis in her relationships with herself, with other people, and with the larger non-human sphere--a crisis that reveals itself as epidemic psychopathology, social pathology and ecological destructiveness. Developmental psychology can be criticized for failing to adequately address this dilemma, based on the following: a) it generally accepts and reinforces a standard of normality that more closely resembles collective insanity, b) it relies heavily on empirical methods that restrict its view of human psychology and, in some respects, contribute to the overall dilemma, and c) it ignores the consequences of raising children in domesticated, human-dominated environments, rather than wild or 'natural' ones, as has historically been more the case. The present essay flows from a consideration of the third criticism.

The Psychological Landscape

The ecological crisis invites us to consider our psychological relatedness to the nonhuman. Sigmund Freud had the following to say:

In the course of his development towards culture man acquired a dominating position over his fellow creatures in the animal kingdom. Not content with this supremacy, however, he began to place a gulf between his nature and theirs. He denied the possession of reason to them, and to himself he attributed an immortal soul, and made claims to a divine descent which permitted him to annihilate the bond of community between him and the animal kingdom. *It is noteworthy that this piece of arrogance is as foreign to the child as it is to the savage or to primitive man.* It is the result of a later, more pretentious stage of development. At the level of totemism primitive man has no repugnance to tracing his descent from an animal ancestor. . . . A child can see no difference between his own nature and that of animals; he is not astonished at animals thinking

and talking in fairy tales; he will transfer to a dog or a horse an emotion of fear which refers to his human father, without thereby intending any derogation of his father. Not until he is grown up does he become so far estranged from the animals as to use their names in vilification of others.

. . . Man is not a being different from animals or different from them; he himself originates in the animal race and is related more closely to some of its members and more distantly to others. The accretions he has since developed have not served to efface the evidences, both in his physical structure and in his mental dispositions, of his parity with them (emphasis added).¹

Freud's commentary portrays (Western) civilization as a process which creates an existential gulf between humans and nonhuman animals. The implications of this "piece of arrogance" were carried through by Freud to his *Civilization and Its Discontents*,² in which he posited a fundamental antagonism between what he regarded to be humanity's 'animal nature' and the restrictions of civilization.³ Freud thought that psychoanalytical theory could help people understand this antagonism and provide guidance for societal reforms which would essentially minimize our neurotic state. Today however the gulf between the human and the nonhuman is as wide as ever and the present state of civilization remains in question.

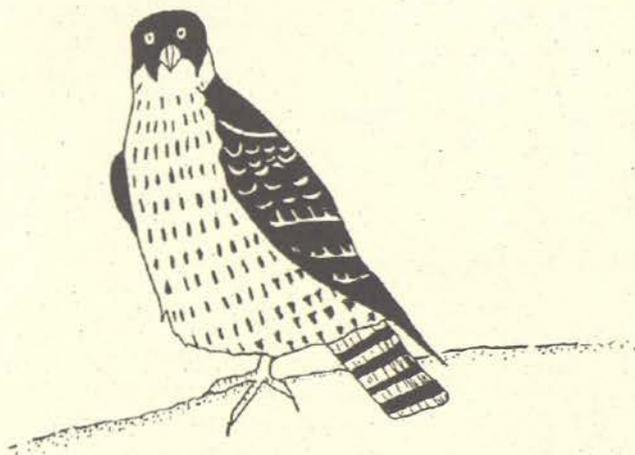
Because, as Freud explained, humans have 'split off' from the larger nonhuman world, the human world itself has shrunk. The resource conservationist Gifford Pinchot's often-quoted line that "[t]here are only people and natural resources"⁴ expresses this modern view. The result of such a separation of the world into humans and resources has been to restrict *psychological* investigation to the human environment alone, as resources are not normally considered to have psychological significance.⁵ Harold F. Searles was one of the first to challenge such a restricted view, stating in 1960 that

[d]uring the past approximately sixty years, the focus of psychiatry's attention has gradually become enlarged, from an early preoccupation with intrapsychic processes..to include interpersonal and broad sociological-anthropo-logical factors. It would seem then that a natural next phase would

consist in our broadening our focus still further, to include man's relationship with his nonhuman environment.⁶

It is not in dispute here that modern humans are largely urbanized and have little experience of wild, multispecific, 'natural' environments; developmental psychology's focus on human settings in this respect is understandable. What is of concern are the developmental implications of restricting children to such settings, and the further implications that this situation might have for the environmental crisis. In addition, even though 'contact' with 'nature' may be limited in the modern, urban setting, the significance that these rare moments of contact might have for the child should not be underestimated. Clare Cooper Marcus, for example, comments that although modern children spend very little time "outside", the vast majority of adult recollections of childhood are drawn from these outdoor moments.⁷ In a study of eighty adult landscape architect students asked to recall their fondest and most vivid childhood memories Marcus found that the dominant topics included time spent in "patches of woodland, marsh, or meadow that still remained between burgeoning subdivisions," camping trips, and visits to 'the country.'⁸ A 1955 M.I.T. study⁹ of forty adults (chosen from 'society at large') likewise found that childhood memories were dominated by wide-open spaces, trees, hills and water. In yet another study involving childhood memories, Edith Cobb found that "gifted or creative people" tend to have vivid recollections of a "profound continuity with natural processes" as children, and are able, to a large extent, to retain these feelings.¹⁰ These gifted people, who early in their lives entered into a harmonious "relationship with nature," were able to maintain an open, creative, metaphorical, and poetic existence, as opposed to the more literal and rigid existence that generally characterizes modernity.¹¹

Having introduced the topic of the nonhuman in human psychological development, the discussion now turns to



an exploration of the existing psychological and eco-philosophical literature which does or could address this topic. For the purposes of this essay three categories of conceptualizing the human with respect to the nonhuman have been distinguished: a) the nonhuman as the "natural environment," b) the nonhuman in relationship with the human, and c) the nonhuman as self. It is important to note however that the boundaries between these categories are not always sharp and that thematic variations will exist within any category. The attempt here is to separately review the work of various researchers in order to show a progression of ideas, rather than to blend their work into a coherent picture of human psychology with respect to the nonhuman.

The Nonhuman as the "Natural Environment"

This category includes any arguments or approaches that promote the nonhuman environment as an important element in human psychological well-being, but which do not necessarily emphasize a mature relatedness to the nonhuman. Warwick Fox, in a major study of the various arguments for the preservation of wilderness, has further categorized some of these approaches as follows: "the gymnasium argument" (i.e. recreational value), "the art gallery argument" (i.e. aesthetic value), "the cathedral argument" (i.e. spiritual value), and the "refuge" argument¹² (i.e. therapeutic value).¹³ In all of these the natural setting essentially acts as a human psychological resource.

A unique study which fits into this discussion was performed by Rachel and Stephen Kaplan, who set their aim at finding out what it is about nature that has such a powerful "effect" on people, including its ability to restore "hassled individuals to healthy and effective functioning." They ask, finally,

[a]re some natural patterns better than others? Is there a way to design, to manage, to interpret natural environments so as to enhance these beneficial influences?¹⁴

In these comments can be found the utilitarian flavour which characterizes this category. The Kaplans were initially interested in discovering and categorizing people's "preferences" among natural settings in order to eventually allow for "prediction of preference." They then moved on to a measurement of "benefits and satisfactions" and an exploration of what constitutes a "restorative environment." In addition to nature's restorative capacities, they noted that

[o]n the spiritual side is the remarkable sense of feeling 'at one,' a feeling that often - but not exclusively - occurs in natural settings. Although the spiritual does not hold a prominent place in the writings of most psychologists, the concern for

meaning, for tranquility, and for relatedness has not gone unnoticed.¹⁵

The 'bottom line' in the Kaplans' study is their concern for the preservation and management of natural places for the psychological benefit of humans:

It is rare to find an opportunity for such diverse and substantial benefits available at so modest a cost. Perhaps this resource for enhancing health, happiness, and wholeness has been neglected long enough.¹⁶

Despite the pioneering nature of this investigation into the nonhuman realm, it still reflects the resourcist and objectifying attitude expressed earlier by Gifford Pinchot. The natural environment in the Kaplans' scheme is essentially a pleasant backdrop for human activity, or a cost-effective source of therapy. Although the Kaplans note the importance of the experience of being "at one" with nature and the "concern...for relatedness," their conclusions in this respect are limited.

The Nonhuman In Relationship with the Human

In contrast to the previous category, the emphasis here is on the importance of a mature *relationship* with the nonhuman and some sort of recognition of the nonhuman 'in its own right.' Environmental philosophers often speak of a "biocentric" worldview, in which the nonhuman is considered to have "intrinsic value," beyond human resource value. Although not all positions that emphasize relationship with nature are strictly biocentric, the psychological picture must clearly change when 'nature' is moved out of the background and placed on more common ground with humans.

Harold F. Searles, who was introduced earlier, has made a valuable contribution to the discussion of human-nonhuman relationships in his extensively documented manuscript *The Nonhuman Environment: In Normal Development and in Schizophrenia*.¹⁷ To date, Searles' work appears to be the only contribution made by a practising psychologist to the topic of the nonhuman environment in human psychological development. Searles begins his work at the same place as did the Kaplans, with a discussion of "our love of gardening; our love of frequenting familiar haunts of Nature...the appeal of beautiful landscapes," etc. However, Searles' thesis goes well beyond that of the Kaplans':

The thesis of [my manuscript] is that the nonhuman environment, far from being of little or no account to human personality development, constitutes one of the most basic ingredients of human psychological existence. It is my conviction that there is within the human individual a sense, whether at a conscious or unconscious level, of relatedness to his

nonhuman environment, that this relatedness is one of the transcendently important facts of human living, that--as with other important circumstances in human existence--it is a source of ambivalent feelings to him, and that, finally, if he tries to ignore its importance to himself, he does so at the peril to his own psychological well-being.¹⁸

Searles suggests that we can relate to the nonhuman environment in two ways: we may see the nonhuman as a carrier of "meanings which basically have to do with people," or alternatively we may relate to a cat "*as being a cat*" or to a tree "*as being a tree*."¹⁹ This second kind of relatedness is crucial to the theme of Searles' work, which is that

the human being is engaged, throughout his life-span, in an unceasing struggle to differentiate himself increasingly fully, not only from his human, but also from his nonhuman environment, while developing, in proportion as he succeeds in these differentiations, an increasingly meaningful relatedness with the latter environment as well as with his fellow human beings.²⁰

According to Searles, it is only through this process of differentiation and relation that one can truly feel a "sense of profound kinship" with the nonhuman, as well as "a profound sense of difference from it."²¹ Searles is quick to point out however that in normal development a "subjective oneness" with the nonhuman environment persists at the "unconscious" level "long after differentiation on a purely perceptual and conscious level." He suggests that it is this hidden nondifferentiated aspect of ourselves that in fact *allows* us to relate to others. Significantly however, Searles does maintain a human/nature dichotomy, despite his emphasis on human relatedness to nature: "mankind's position in regard to his environment is existentially--innately--a conflictual position. He is grounded in Nature, and yet is unbridgeably apart from it."²²

Searles summarized his conclusions nicely in a later article:

I postulate that an ecologically healthy relatedness to our nonhuman environment is essential to the development and maintenance of our sense of being human and that such a sense of relatedness has become so undermined, disrupted, and distorted, concomitant with the ecological deterioration, that it is inordinately difficult for us to integrate [certain] feeling experiences [associated with the ecological crisis], ...incompatible to any full-fledged human living. Over recent decades we have come from dwelling in an outer world in which the living works of nature either predominated or were near at hand, to dwelling in an environment dominated by a technology which is wondrously powerful and yet nonethe-

less dead, inanimate. I suggest that in the process we have come from being subjectively differentiated from, and in meaningful kinship with, the outer world, to finding this technology-dominated world so alien, so complex, so awesome, and so overwhelming that we have been able to cope with it only by regressing, in our unconscious experience of it, largely to a state of nondifferentiation from it. I suggest, that is, that this "outer" reality is psychologically as much a part of us as its poisonous waste products are part of our physical selves (emphasis added).²³

It was through his work with schizophrenic patients, whom he considered to be living largely in a state of nondifferentiation from their surroundings, that Searles gained much of his insight. In recognizing that certain mental patients, for example, confuse their own 'bodily workings' with those of machines, he suggests that even healthy people may regard their surroundings as part of themselves. He asserts that the difference between a healthy and a psychotic or neurotic patient, in this regard, is quantitative, not qualitative.²⁴ The above quotation argues, then, that the pressures of modern living are forcing us further toward the nondifferentiated state of the mental patient; we are, in effect, becoming one with our machines. However, an alternative explanation suggests itself. Because Searles regards 'excessive' subjective oneness with one's environment as a regressive or pathological condition, he cannot see our identifying with our machines as anything but abnormal. But perhaps it is *normal* to feel strong continuity with one's surroundings, whatever they may be. The suggestion here is that relationship, as Searles himself pointed out, depends on strong feelings of continuity with that to which one relates. Thus part of the real danger of living amongst machinery and identifying with it, of becoming pieces of technology ourselves, is that it psychologically estranges us from, and impairs our ability to relate to, the more 'natural' processes of a *living, breathing* planet. As such, we find nature to be alien, chaotic, irrational, and beneath the dignity of our 'rational,' machine-like, technological being. To the extent that we do not feel this way, we have retained some measure of relatedness.

The discussion at this point is bordering on "the non-human as self" category, which will be considered below. It is noted for the moment that what is in dispute here is the traditional Freudian principles that health is characterized by strong ego boundaries, and that a "yearning" for "oneness" with nature is always infantile or regressive.

Although Searles' consideration of the relationship between the human and the nonhuman represents a departure for a psychologist, this topic is the central concern of ecophilosophers. What is at issue in many ecophilosophical investigations is the conception of the human self. For example, Neil Evernden suggests that no

"object of attention" can be examined without first attending to the *relational* context in which it exists. He suggests that if we reverse

the polarity of attention, so to speak, so that the bond of relationship is more significant than the end-points it joins

then

an individual is not a thing at all, but a sequence of ways of relating... Concentration on those relationships, and on relationship in general, clearly constitutes a substantial alteration of our way of understanding the individual.²⁵

Evernden follows up the implications of such a relational view of the self, noting that "the kind and nature" of relationships that we establish -- which gives us our context and meaning -- develop in our early years: "the nature of the relationship established [in development] will determine the world-view that the person will become."²⁶ And now,

[t]he situation in which we find ourselves [the ecological crisis] is a consequence of our own choice of context, for we have adopted one which defines relationships to nature out of existence.²⁷

In refusing subjectivity to the nonhuman, Evernden suggests that "we left nothing to relate to, no one else in the world to reciprocate." As such

what the environmental movement appears to protest - the extermination of other forms of life - is simply the physical manifestation of a global genocide that is long since established in the minds of us all. The subjects are first destroyed [ie. the non-human is robbed of subjectivity], and later their bodies crumble.²⁸

Evernden provides an elegant view of the environmental crisis, but his analysis goes further. He suggests that *all* relationship, including that between humans, is in jeopardy "and that we should not presume any firm boundary between our behaviour towards the human and towards the nonhuman; all 'others' are similarly threatened."²⁹ We are thus reminded that the ecological crisis cannot be abstracted and considered separately from the other crises present in human society.

The psychological development of human relationships with the nonhuman has also been explored extensively by the naturalist Paul Shepard. In contrast to Searles, who was a psychologist (and to whom Shepard acknowledges an indebtedness), Shepard's work has more of an 'ecological' bias. As such, his efforts to draw a connection between human psychological development and the ecological crisis are invaluable. Although Shepard generally stays within the language of psychology, he is clearly trying to evoke a sense of human



relatedness to the world that goes beyond the psychological jargon, and that flows from his sensibilities as a naturalist. The work is admittedly speculative, and undoubtedly contains some erroneous ideas, but this is only to be expected at such an exploratory stage. What is more significant is the uniqueness of Shepard's thesis and the contribution that it could make to developmental psychology if it were given a proper airing.

The majority of Shepard's work on this topic are contained in three books. In *The Tender Carnivore and the Sacred Game*³⁰ he traces the roots of the ecological crisis back to the Agricultural Revolution, which he suggests saw the beginnings of a separation, both physical and psychological, between humans and their wilderness context. In this book Shepard made his first effort at presenting a normative psychological model of humans based on a hunter-gatherer condition, rather than on our modern technological situation. He argued that a return of humans to a wilderness existence would not be a 'going back to the past' because psychologically we have never really left it; in a sense, modern living simply denies us the wilderness which our healthy psychological development still requires. These views will become clearer in considering his next two books, in which his thoughts were developed further.

In *Thinking Animals*,³¹ Shepard considers the topic of human relatedness to *animal* 'otherness.' His thesis in this case is that "the conceptual uses³² of animals are an aspect of human biology, a part of 'human ecology.'"³³ As an "intelligent" social species, he argues, humans are absorbed with relationship and therefore must have a clear conception of self, as distinct from other. In this respect, Shepard closely follows Searles. However, Shepard takes Searles' point further in claiming that a concept of self not only requires a differentiation from otherness, but also a radical seeing of oneself in it. His argument is as follows. The human self is not easily perceived; "it is too fluid and close. Nor can it be easily represented."³⁴ Animals, essentially, teach us about ourselves. The number of animal metaphors that we use daily to describe our behaviours, as well as the number of animals present in children's literature, attest to this. "By 'identifying' with a number of animals in turn, the child discovers a *common ground* with other beings despite external differences between himself and them" (emphasis added).³⁵ That is, children learn about themselves by discovering how they are like and unlike other animals. In sum,

[w]e are members of a human family and society, but the presence of animal others enlarges our per-

ception of the self beyond the city to the limits of the world, and deeply inward to that ground of being where live the lizard and monkey and fish.³⁶

A deep sense of human kinship with nonhuman animals - one that can only be realized through an intimate and authentic relationship with them - is the psychological norm that Shepard is suggesting. The innate conflict between humans and their nonhuman environment posited by Searles is emphatically absent in Shepard's work. In a world which has become "too small for animals," Shepard is wondering aloud what effect living in a world of "inadequate otherness" is having on our concept of self.

Shepard's arguments often run counter to the conventional wisdom, and for this reason they are difficult to reproduce in a short space. But the following point is perhaps the most basically intuitive and comprehensible aspect of his project.

There are a whole series of developmental undertakings in human mental and emotional growth which rely on the availability and abundance of nonhuman life. Until we understand exactly how each of these work, we should follow what might be called "the principle of phylogenetic probity," which is simply that the healthy function of an organ is most assured under circumstances similar to those in which it evolved.³⁷

The apparent madness of our racing culture - a culture that increasingly takes us away from the circumstances in which we evolved - is the topic of Shepard's culminating book, *Nature and Madness*.³⁸ In it he explores the prospect of "general, culturally-ratified distortions of childhood" and "massive disablement of ontogeny as the basis of irrational and self-destructive attitudes toward the natural environment."³⁹

The backbone of Shepard's book is a proposed normative psycho-genesis which he argues is disrupted by modern culture. His arguments are distinctly 'biological': a "seed of normal ontogeny is present in all of us."⁴⁰ This seed "triggers expectations" within the child at the different stages of its development. For example, at birth the infant 'expects' to find a mother--whose continuous presence is initially required, and to whom the child will form its first relational bonds. The natural setting proposed in this theory of psychogenesis is critical; it includes a richness of wild animals, fresh air, trees, plants, and so forth. It is within this wilderness context that the child further develops her sense of self (as discussed, in part, in *Thinking Animals*⁴¹), and in which she forms a bond of relatedness with nature. Shepard posits that, just as the child 'expected' and 'needed' a mother, continued normal development requires a bonding with nature. The way that children naturally thrive when in contact with nonhuman nature evidences their biological 'readiness' for it. (See Clay, note 9, Cobb, note 10, and Marcus, note

7.) Social bonds ("infant-mother, juvenile-family, adolescent-community") in effect provide the ground, the model, for developing further relationships with the otherness of animals, plants, and so on. The child in turn sees these as "metaphorical sign images or messages about the inner world, the binding forces of human society, and the invisible spiritual realm."⁴² The final stage of adolescence in this model is a bonding with the cosmos, which has been made possible by an expanding sense of wholes, from the womb, to the mother and body, to the earth, and finally to the "starry sky." The adult who has developed normally, according to this model, has a sense of belonging in both nature and the larger cosmos, and this has been achieved through a growth of ever-more-subtle relationships or bondings. The cosmic loneliness, anxiety, uncertainty, and despair of the modern human dilemma are nowhere to be found.

Shepard summarizes:

The archetypal role of nature - the mineral, plant, and animal world found most completely in wilderness - is in the development of the individual human personality, for it embodies the poetic expression of ways of being and relating to others. Urban civilization creates the illusion of a shortcut to individual maturity by attempting to omit the eight to ten years of immersion in nonhuman nature. Maturity so achieved is spurious because the individual, though he may be precociously articulate and sensitive to subtle social interplay, is without a grounding in the given structure that is nature....Indeed the real bitterness of modern social relationships has its roots in the vacuum where a beautiful and awesome otherness should have been encountered.⁴³

The stages of development proposed by Shepard are characterized by a "highly timed openness in which the attention of the child is pre-directed by an intrinsic schedule, a hunger to fill archetypal forms with specific meaning."⁴⁴ Only when a culture is sensitive to this schedule and aware of its needs, Shepard argues, will these forms be properly filled. Culture, then, is not some recent invention that allows humans to transcend their biology, but rather is a critical component of it. Modern culture, in failing the child, arrests her psychological development. We fail the adolescent, Shepard writes, when we rob him of a "mythopoetic vision of man in nature." As a result

he will for the rest of his life struggle with existential problems that are normally the work of a few critical years in his second decade of life. I do not mean that the adolescent normally gains instant wisdom, but that the frame-work of nature as metaphorical foundation for cosmic-at-homeness is as native to the human organism in its adolescent years as any nutritive element in the diet.⁴⁵

Shepard concludes his book on a somewhat hopeful note:

There is a secret person undamaged in every individual...[Yet all of our archetypal impulses] are assimilated in perverted forms in modern society: our profound love of animals twisted into pets, zoos, decorations, and entertainment; our search for poetic wholeness subverted by the model of the machine instead of the body; the moment of pubertal idealism shunted into nationalism or ethereal other-worldly religion instead of ecosophical cosmology.

But this means that we have not lost, and cannot lose, the genuine impulse. It awaits only an authentic expression.⁴⁶

Although every child has the potential to grow toward a mature relatedness to the world, as described by Shepard, the problem arises that "[a]dults...cut short from their own potential, are not the best of mentors."⁴⁷ However, the ecological crisis continues to remind us that there is a grave problem with both our material and psychological relationships with the nonhuman, and Shepard provides an important new thesis for consideration.

The Nonhuman as Self

Both transpersonal psychologists and a growing number of ecophilosophers describe the self as something that exists beyond the individual ego, as something that is continuous with the world, and that extends in some measure beyond the physical boundaries of the skin. Paul Shepard, who emphasized relationship and bonding with nature in the above discussion, is quoted below now presenting a form of "nonhuman as self" argument.

[w]e are hidden from ourselves by habits of perception...[O]ur language, for example, encourages us to see ourselves--or a plant or animal--as an isolated sack, a thing, a contained self. Ecological thinking, on the other hand requires a kind of vision across boundaries. The epidermis of the skin is ecologically like a pond surface or a forest soil, not a shell so much as a delicate interpenetration. It reveals the self enobled and extended rather than threatened as part of the landscape and the ecosystem, because the beauty and complexity of nature are continuous with ourselves.

Man is in the world and his ecology is the nature of that inness. He is in the world as in a room, and in transience, as in the belly of a tiger or in love. What does he do there in nature? What does nature do there in him?⁴⁸

Is it paradoxical to feel both continuous with and in relationship with one's nonhuman surroundings?⁴⁹

Harold Searles noted earlier that relationship is possible only if at some level of awareness one feels nondifferentiated from that to which one relates. An even more helpful discussion of levels of awareness has been presented by the naturalist John Livingston:

It could...be argued that *individual* self-consciousness may be only the most basic and fundamental of several layers or envelopes of self-consciousness...

There seems little doubt that in at least many animals there is what might be called a "group self-consciousness." Witness the behaviour of clustering invertebrates, schooling fishes, flocking birds, hunting wolves, banding primates....Very probably there is also an *interspecies* 'community self-consciousness,' judging by the reciprocal behaviour of multispecies associations and communities. There may even even be a still wider consciousness of *self as whole*...[an] awareness of planetary biospherical self, a total participating consciousness. At this stage, "other" loses all meaning.⁵⁰

Livingston posits that "Western knowledge systems" keep us from experiencing anything other than an individual, egoic self, although other 'forms' of self and of relationship are possible. Livingston, in a sense, turns Searles' discussion on its head. The egoic, individual self in Livingston's scheme results from a cultural reification at the most basic level of self-consciousness, whereas a more continuous, larger sense of self represents a more mature way of being in the world and of relating to the rest of the biosphere.⁵¹ Searles would no doubt respond that consciously felt continuity with nature is regressive or pathological. But perhaps Shepard's model of normative psychogenesis shows a way in which one might develop a "higher oneness" (Abraham Maslow's term) with nature, as opposed to a more regressive, infantile "lower oneness."

Livingston is not alone in suggesting that an extended sense of self is possible. A central theme of the philosophy of deep ecology is that of identifying with, or seeing oneself in, the nonhuman in as large a sense as possible. Warwick Fox, a deep ecology scholar, argues that such identification is based most widely on the "deep-seated realization...that we and all other entities are aspects of a single unfolding reality."⁵² Fox has also recently drawn attention to the similarities between the writings of deep ecologists and of transpersonal psychologists. We are thus able to turn the discussion back to the work of psychologists.

Abraham Maslow, a pioneer of transpersonal psychology, was caught up in the search for the healthy, well-integrated, whole human being, and was very selective in his choice of psychological subjects. In his later work Maslow was describing the exceptionally healthy person as one who was not only self-actualizing, but also self-

transcending, that is, able to let go of or transcend the egoic self. What is significant here is that Maslow, a psychologist, and Livingston and Shepard, both naturalists, have all explored notions of healthy selfhood, and have all converged on the idea of what Maslow calls self-transcendence. Maslow was clearly moving even further toward the naturalists' positions when he said that

Perhaps...thrilling to nature (perceiving it as true, good, beautiful, etc.) will one day be understood as a kind of self-recognition or self-experience, a way of being oneself and fully functional, a way of being at home, a kind of biological authenticity, of "biological mysticism," etc. . . . the "highest" experience ever described, the joyful fusion with the ultimate that man can conceive, can be seen simultaneously as the deepest experience of our ultimate personal animality and species-hood, as the acceptance of our profound biological nature as isomorphic with nature in general.⁵⁵

Maslow's work represents the beginning of transpersonal (trans-egoic) psychology, and many of his findings have since assisted in the articulation of transpersonal theories of psychological development. The transpersonal self-sense develops in stages "through a process of differentiation, transcendence, and integration at each stage of growth."⁵⁴ A "strong, healthy ego" is regarded as a necessary step in the growth towards a transpersonal self, but is not taken in itself as the ultimate measure of health. Strong ego identification in fact leads to a feeling of being alone in a "potentially hostile universe." At this point it is important to develop what Karen Horney calls a "real" or existential self as opposed to a "pseudo-self." Facing the existential realities that confront the ego and living in openness to life's possibilities characterize this stage. The real existential self is able to move on to the next stages of "expanded self-concept": the self goes through further and further levels of differentiation, transcendence and integration, at each step developing a more inclusive representation of self. "Fixation at any stage of development can be regarded as a disturbance in normal patterns of growth."⁵⁵

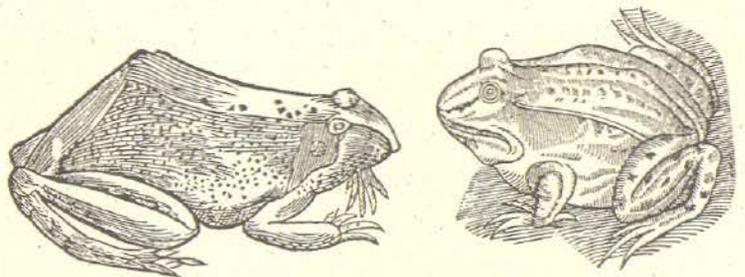
The above description of transpersonal development has been very brief, however a parallel to Shepard's model of development should be apparent. As well, Livingston's comments about the hegemony of the "individual self" also find a home in transpersonal theory as a "fixation" of the individual at the egoic stage of development. What is absent from most transpersonal theorizing, despite Maslow's encouraging words, is a sense of human belonging in nature. In fact anthropocentrism runs through most of transpersonal psychology, and for this

reason Warwick Fox suggests that transpersonal psychology needs to be "ecologized"--as 'ecology' likewise needs to be "psychologized."

Frances Vaughan has noted that all mental illness may be regarded fundamentally as a "mistaken perception of self."⁵⁶ Shepard, Searles, Evernden, Cobb, Livingston, and Fox have likewise pointed to a 'mistaken' sense of self that ignores the innate embeddedness of humans in nature, and which leads to destructive behaviours toward the nonhuman. Perhaps through the meeting of disciplines that Fox proposes a clearer view of the relationship between self-conception and the ecological crisis will show itself.

Notes

1. Sigmund Freud, "One of the Difficulties of Psycho-analysis," translated by Joan Riviere, in *Collected Papers, Volume 4* (London: Hogarth Press, 1946), pp. 351-352.
2. Sigmund Freud, *Civilization and Its Discontents*, translated and edited by James Strachey, (New York: W. W. Norton & Company, 1961).
3. Freud did however regard civilization as both inevitable and ultimately desirable.
4. Gifford Pinchot, *Breaking New Ground* (New York: Harcourt, Brace and Co., 1947).
5. Although nature is usually assumed to contain only material resources, some arguments have emerged recently which view nature as a *psychological* resource. These will be discussed below.
6. Harold F. Searles, *The Nonhuman Environment: In Normal Development and in Schizophrenia* (New York: International Universities Press, 1960), p. 23.
7. Clare Cooper Marcus, "Remembrance of Landscape Past," *Landscape* 22:3 pp. 35-43.
8. *Ibid.*
9. Grady Clay, "Remembered Landscapes," in *The Subversive Science*, eds. Paul Shepard and Daniel McKinley, (Boston: Houghton Mifflin Co., 1969), pp. 133-138.
10. Edith Cobb, "The Ecology of Imagination in Childhood," in *The Subversive Science*, eds. Paul Shepard and Daniel McKinley, (Boston: Houghton Mifflin Co., 1969), pp. 122-132.



11. Ibid.
12. The "refuge argument" is one aspect of what Fox calls the "psychogenetic argument", the other being an argument for the need to "bond" with wild nature. For the purposes of this essay the psychogenetic argument is divided into its "refuge" and "bonding" components, the latter being relevant to the "non-human in relationship with the human" category.
13. Warwick Fox, *Toward a Transpersonal Ecology* (Boston: Shambhala, 1990), pp. 155-157.
14. Rachel Kaplan and Stephen Kaplan, *The Experience of Nature; A Psychological Perspective* (Cambridge: Cambridge University Press, 1989), p. ix.
15. Ibid., p. 197.
16. Ibid., p. 198.
17. Harold F. Searles, *The Nonhuman Environment: In Normal Development and in Schizophrenia* (New York: International Universities Press, 1960).
18. Ibid., pp. 5-6.
19. Ibid., p. 19.
20. Ibid., p. 30.
21. Ibid., p. 396.
22. Ibid., p. 104.
23. Harold F. Searles, "Unconscious Processes in Relation to the Environmental Crisis," *Psychoanalytical Review* 59, p. 368.
24. Searles, *The Nonhuman Environment: In Normal Development and in Schizophrenia*, p. 77 and p. 55.
25. Neil Evernden, *The Natural Alien: Humankind and Environment* (Toronto: University of Toronto Press, 1985), p. 133.
26. Ibid., p. 134.
27. Ibid., p. 135.
28. Ibid., p. 136.
29. Ibid.
30. Paul Shepard, *The Tender Carnivore and the Sacred Game* (New York: Charles Scribner's Sons, 1973).
31. Paul Shepard, *Thinking Animals* (New York: Viking, 1978). Material is also drawn here from a later article by Paul Shepard, "The Ark of the Mind," *Parabola* 8:2, which summarizes much of Shepard's 'animal' argument.
32. In the sense that wilderness may be 'used' by humans to foster healthy psychological development, Shepard's case is what Warwick Fox would call a "psychogenetic argument." That is, it treats wilderness as a psychological resource. Even Shepard admits at one point that his "human growth and thought" argument for the preservation of animals is "shamelessly selfish," although "it must embrace nature and charity." See Shepard, *Thinking Animals*, p. 249. In another sense, however, the human psychological 'need' for wilderness is simply part of being human, not some shamelessly selfish impulse. In this sense all species have 'needs.' It would be absurd, for example, to call a bird selfish for needing a tree in which to build a nest. What separates Shepard's arguments from those of the Kaplans' is his emphasis on a mature relatedness or bonding with the nonhuman, rather than on its therapeutic value.
33. Shepard, *Thinking Animals*, p. 249.
34. Ibid., p. 24.
35. "That children are interested in animals seems self-evident...one of those 'givens' which in the past has not aroused the curiosity of psychologists." See Shepard, *Thinking Animals*, p. 59.
36. Paul Shepard, "The Ark of the Mind." p. 59.
37. Shepard, *Thinking Animals*, p. 189.
38. Paul Shepard, *Nature and Madness* (San Francisco: Sierra Club Books, 1982).
39. Ibid., p. ix.
40. Ibid., p. 6.
41. see note #31.
42. Shepard, *Nature and Madness*, p. 112.
43. Ibid., p. 108.
44. Ibid., p. 110.
45. Ibid., p. 71.
46. Ibid., pp. 129-130.
47. Ibid., p. 129.
48. Paul Shepard, "Ecology and Man--A Viewpoint," in *The Subversive Science*, eds. Paul Shepard and Daniel McKinley (Boston: Houghton Mifflin Co., 1969), p. 2 and p. 1.
49. This is a question that has raised some debate in eco-philosophical circles. See, for example, Peter Reed, "Man Apart: An Alternative to the Self-Realization Approach," *Environmental Ethics*, 11, pp. 53-69.
50. John Livingston, "Ethics as Prosthetics," in *Environmental Ethics: Philosophical and Policy Perspectives, Vol. 1*, edited by Philip P. Hanson, (Burnaby, B.C.: Institute for Humanities/SFU Publications, 1986), pp. 73-74.
51. Livingston is not arguing for an abandonment of the concept of the individual or of individual self-consciousness. He is instead arguing that the inability to experience *other* levels of self is problematic in our dealings within the biosphere. See Livingston, "Ethics as Prosthetics," p.74, and John Livingston in David Cayley's "The Age of Ecology," transcript from the radio program *Ideas*, broadcast on CBC Radio (Toronto: Canadian Broadcasting Corporation, 1990), p. 13.
52. Fox, p. 252.
53. Abraham Maslow, *The Farther Reaches of Human Nature*, (New York: Viking, 1971), pp. 333-334.
54. Frances Vaughan, "Discovering Transpersonal Identity," *Journal of Humanistic Psychology*, 25:3, p. 14.
55. Ibid., p. 18.
56. Ibid., p. 14.

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