The Ecology of Magic

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(This chapter excerpt is from David Abram's **Spell of the Sensuous**)

Late one evening, I stepped out of my little hut in the rice paddies of eastern Bali and found myself falling through space. Over my head the black sky was rippling with stars, densely clustered in some regions, almost blocking out the darkness between them, and loosely scattered in other areas, pulsing and beckoning to each other. Behind them all streamed the great river of light, with its several tributaries. But the Milky Way churned beneath me as well, for my hut was set in the middle of a large patchwork of rice paddies, separated from each other by narrow, two-foot-high dikes, and these paddies were all filled with water. By day, the surface of these pools reflected perfectly the blue sky, a reflection broken only by the thin, bright-green tips of new rice. But by night, the stars themselves glimmered from the surface of the paddies, and the river of light whirled through the darkness underfoot as well as above; there seemed no ground in front of my feet, only the abyss of starstudded space falling away forever.

I was no longer simply beneath the night sky, but also above it; the immediate impression was of weightlessness. I might perhaps have been able to reorient myself, to regain some sense of ground and gravity, were it not for a fact that confounded my senses entirely: between the galaxies below and the constellations above drifted countless fireflies, their lights flickering like the stars, some drifting up to join the constellations overhead, others, like graceful meteors, slipping down from above to join the constellations underfoot, and all these paths of light upward and downward were mirrored, as well, in the still surface of the paddies. I felt myself at times falling through space, at other moments floating and drifting. I simply could not dispel the profound vertigo and giddiness; the paths of the fireflies, and their reflections in the water's surface, held me in a sustained trance. Even after I crawled back to my hut and shut the door on this whirling world, the little room in which I lay seemed itself to be floating free of the Earth.

Fireflies! It was in Indonesia, you see, that I was first introduced to the world of insects, and there that I first learned of the great influence that insects--such diminutive entities--could have upon the human senses. I had traveled to Indonesia on a research grant to study magic--more precisely, to study the relation between magic and medicine, first among the traditional sorcerers, or *dukuns,* of the Indonesian archipelago, and later among the *djankris,* the traditional shamans of Nepal. The grant had one unique aspect: I was to journey into rural Asia not outwardly as an anthropologist or academic researcher, but as an itinerant magician in my own right, in hopes of gaining a more direct access to the local sorcerers. I had been a professional sleight-of-hand magician for five years, helping to put myself through college by performing in clubs and restaurants throughout New England. I had, as well, taken a year off from my studies in the psychology of perception to travel as a street magician through Europe and, toward the end of thatiourney, had spent some months in London, working with R. D. Laing and his associates, exploring the potential of using sleight-of-hand magic in psycho-therapy as a means of engendering communication with distressed individuals largely unapproachable by dinical healers. As a result of this work I became interested in the relation, largely forgotten in the West, between folk medicine and magic.

This interest eventually led to the aforementioned grant, and to my sojourn as a magician in rural Asia. There, my sleight-of-hand skills proved invaluable as a means of stirring the curiosity of the local shamans. Magicians, whether modern entertainers or indigenous, tribal sorcerers, work with the malleable texture of perception. When the local sorcerers gleaned that I had at least some rudimentary skill in altering the common field of perception, I was invited into their homes, asked to share secrets with them, and eventually encouraged, even urged, to participate in various rituals and ceremonies.

But the focus of my research gradually shifted from a concern with the application of magical techniques in medicine and ritual curing, toward a deeper pondering of the traditional relation

between magic and the natural world. This broader concern seemed to hold the keys to the earlier one. For none of the several island sorcerers whom I came to know in Indonesia, nor any of the *djankris* with whom I lived in Nepal, considered their work as ritual healers to be their major role or function within their communities. Most of them, to be sure, *were* the primary healers or "doctors" for the villages in their vicinity, and they were often spoken of as such by the inhabitants of those villages. But the villagers also sometimes spoke of them, in low voices and in very private conversations, as witches (*lejaks* in Bali)--dark magicians who at night might well be practicing their healing spells backward in order to afflict people with the very diseases that they would later cure by day. I myself never consciously saw any of the magicians or shamans with whom I became acquainted engage in magic for harmful purposes, nor any convincing evidence that they had ever done so. Yet I was struck by the fact that none of them ever did or said anything to counter such disturbing rumors and speculations, which circulated quietly through the regions where they lived. Slowly I came to recognize that it was through the agency of such rumors, and the ambiguous fears that such rumors engendered, that the sorcerers were able to maintain a basic level of privacy. By allowing the inevitable suspicions and fears to circulate unhindered in the region, the sorcerers ensured that only those who were in real and profound need of their skills would dare to approach them for help. This privacy, in turn, left the magicians free to their primary craft and function.

A clue to this function may be found in the circumstance that such magicians rarely dwell at the heart of their village; rather, their dwellings are commonly at the spatial periphery of the community amid the surrounding rice fields, at the edge of the forest, or among a cluster of boulders. For the magician's intelligence is not circumscribed *within* the society--its place is at the edge, mediating *between* the human community and the larger community of beings upon which the village depends for its nourishment and sustenance. This larger community includes, along with the humans, the multiple nonhuman entities that constitute the local landscape, from the myriad plants and animals that inhabit or move through the region, to the particular winds and weather patterns that inform the local geography, as well as the various land-forms-forests, rivers, caves, mountains-that lend their specific character to the surrounding Earth.

The traditional magician, I came to discern, commonly acts as an intermediary between the human collective and the larger ecological field, ensuring that there is an appropriate flow of nourishment, not just from the landscape to the human inhabitants but from the human community back to the local Earth. By their rituals, trances, ecstasies, and 'journeys," magicians ensure that the relation between human society and the larger society of beings is balanced and reciprocal, and that the village never takes more from the living land than it returns to it-not just materially, but with prayers, propitiations, and praise. The scale ofa harvest or the size of a hunt is always negotiated between the tribal community and the natural world it inhabits. To some extent every adult in the community is engaged in this process of listening and attuning to the other presences that surround and influence daily life. But the shaman or sorcerer is the exemplary voyager in the intermediate realm between the human and the more-than-human worlds, the primary strategist and negotiator in any dealings with the Others.

And it is only as a result of his ongoing engagement with the animate powers that dwell beyond the strictly human community that the traditional magician is able to alleviate many individual illnesses that arise *within* that community. Disease, in most such cultures, is conceptualized as a disequilibrium within the sick person, or as the intrusion of a demonic or malevolent presence into his body. There are, at times, malevolent influences within the village that disrupt the health and emotional well-being of susceptible individuals within the community. Yet such destructive influences within the human group are commonly traceable to an imbalance between the human collective and the larger field of forces in which it is embedded. Only those persons who, by their everyday practice, are involved in monitoring and modulating the relations *between* the human village and the larger animate environment, are able to appropriately diagnose, treat, and ultimately relieve personal ailments and illnesses arising *within* the village. Any healer who was not simultaneously attending to the complex relations between the human community and the larger

more-than-human field will likely dispel an illness from one person only to have the same problem arise (perhaps in a new guise) somewhere else in the village. Hence, the traditional magician or "medicine person" functions primarily as an intermediary between human and nonhuman worlds, and only secondarily as a healer. Without a continually adjusted awareness of the relative balance or imbalance between the local culture and its nonhuman environment, along with the skills necessary to modulate that primary relation, any "healer" is worthless-indeed, not a healer at all. The medicine person's primary allegiance, then, is not to the human community, but to the earthly web of relations in which that community is embedded--it is from this that her or his power to alleviate human illness derives.

The primacy of nonhuman nature for magicians, and the centrality of their relation to other species and to the Earth, is not always evident to Western researchers. Countless anthropologists have managed to overlook the ecological dimension of the shaman's craft, while writing at great length of the shaman's rapport with "supernatural" entities. We can attribute much of this oversight to the modern, civilized assumption that the natural world is largely determinate and mechanical, and that what is experienced as mysterious, powerful, and beyond human ken must therefore be of some other, nonphysical realm above nature--"supernatural." Nevertheless, that which is viewed with the greatest awe and wonder by indigenous, oral cultures is, I suggest, none other than what we would call *nature* itself. The deeply mysterious powers and entities with whom the shaman enters into a rapport are the same forces--plants, animals, forests, and winds--that to literate, "civilized" Europeans are just so much scenery, the pleasant backdrop of our more pressing human concerns.

To be sure, the shaman's ecological function, his or her role as intermediary between human society and the land, is not always obvious at first blush, even to a sensitive observer. We see the shaman being called upon to cure an ailing tribe member of his or her sleeplessness, or perhaps simply to locate some missing goods; we witness him entering into trance and sending his awareness into other dimensions in search of insight and aid. Yet we should not be so ready to interpret these dimensions as "supernatural," nor as realms entirely "internal" to the personal psyche of the practitioner. For it is likely that the "inner world" of our Western psychological experience, like the supernatural heaven of Christian belief, originated in the loss of our ancestral reciprocity with the living landscape. When the animate presences with whom we have evolved over several million years are suddenly construed as having less significance than ourselves, when the generative earth that gave birth to us is defined as a soulless or determinate object devoid of sensitivity and sentience, then that wild otherness with which human life had always been entwined must migrate, either into a supersensory heaven beyond the natural world, or else into the human skull itself--the only allowable refuge, in this world, for what is ineffable and unfathomable.

But in genuinely oral, tribal cultures, the sensuous world itself remains the dwelling place of the gods, the numinous powers that can either sustain or extinguish human life. It is not by sending his awareness out *beyond* the natural world that the shaman makes contact with the purveyors of life and health, nor by journeying into his personal psyche; rather it is by propelling his awareness *laterally,* outward into the depths of a landscape at once *sensuous and* psychological, this living dream that we share with the soaring hawk, the spider, and the stone silently sprouting lichens on its coarse surface.

In keeping with the popular view of shamanism as a tool for personal transcendence, the most sophisticated definition of "magic" that now circulates through the American counterculture is "the ability or power to alter one's consciousness at will." There is no mention made of any *reason* for altering one's state of consciousness. Yet in tribal cultures that which we call "magic" takes all of its meaning from the fact that, in an indigenous and oral context, humans experience their own intelligence as simply *one* form of awareness among many others. The traditional magician cultivates an ability to shift out of his or her common state of consciousness *precisely in order to make contact with other species on their own terms.* Only by temporarily shedding the accepted perceptual logic of his or her culture can the shaman hope to enter into a rapport with the multiple nonhuman sensibilities that animate the local landscape. It is this, we might say, that defines a

shaman: the ability to readily slip out of the perceptual boundaries that demarcate his or her particular culture-boundaries reinforced by social customs, taboos, and, most important, the common speech or language-in order to make contact with, and learn from, the other powers in the land. Shamanic magic is precisely this heightened receptivity to the meaningful solicitations--songs, cries, and gestures--of the larger, more-than-human field.

The magician's relation to nonhuman nature was not at all my intended focus when 1 embarked on my research into the medical uses of magic and medicine in Indonesia, and it was only gradually that I became aware of this more subtle dimension of the native magician's craft. The first shift in my preconceptions came when I was staying for some days in the home of a young *balian,* or magic practitioner, in the interior of Bali. I had been provided with a simple bed in a separate, one-room building in the *balian's* family compound (most homes in Bali comprise several separate small buildings set on a single enclosed plot of land). Early each morning the *balian's* wife came by to bring me a small plate of delicious fruit, which I ate by myself, sitting on the ground outside, leaning against my hut and watching the sun slowly climb through the rustling palm leaves.

I noticed, when she delivered the plate of fruit, that my hostess was also balancing a tray containing many little green bowls-small, boatshaped platters, each of them woven neatly from a freshly cut section of palm frond. The platters were two or three inches long, and within each was a small mound of white rice. After handing me my breakfast, the woman and the tray disappeared from view behind the other buildings, and when she came by some minutes later to pick up my empty plate, the tray was empty as well.

On the second morning, when I saw the array of tiny rice platters, I asked my hostess what they were for. Patiently, she explained to me that they were offerings for the household spirits. When 1 inquired about the Balinese term that she used for "spirit," she repeated the explanation in Indonesian, saying that these were gifts for the spirits of the family compound, and I saw that I had understood her correctly. She handed me a bowl of sliced papaya and mango and slipped around the corner of the building. I pondered for a minute, then set down the bowl, stepped to the side of my hut, and peered through the trees. I caught sight of her crouched low beside the corner of one of the other buildings, carefully setting what I presumed was one of the offerings on the ground. Then she stood up with the tray, walked back to the other corner, and set down another offering. I returned to my bowl of fruit and finished my breakfast.

That afternoon, when the rest of the household was busy, I walked back behind the building where I had seen her set down two of the offerings. There were the green platters resting neatly at the two rear corners of the hut. But the little mounds of rice within them were gone.

The next morning I finished the sliced fruit, waited for my hostess to come by and take the empty bowl, then quietly beaded back behind the buildings. Two fresh palm leaf offerings sat at the same spots where the others had been the day before. These were filled with rice. Yet as I gazed at one of them I suddenly noticed, with a shudder, that one of the kernels of rice was moving. Only when I knelt down to look more closely did I see a tiny line of black ants winding through the dirt to the palm leaf. Peering still closer, I saw that two ants had already climbed onto the offering and were struggling with the uppermost kernel of rice; as I watched, one of them dragged the kernel down and off the leaf, then set off with it back along the advancing line of ants. The second ant took another kernel and climbed down the mound of rice, dragging and pushing, and fell over the edge of the leaf; then a third climbed onto the offering. The column of ants emerged from a thick clump of grass around a nearby palm tree. I walked over to the other offering and discovered another column of tiny ants dragging away the rice kernels. There was an offering on the ground behind my building as well, and a nearly identical line of ants. I walked back to my room chuckling to myself. The *balian* and his wife had gone to so much trouble to daily placate the household spirits with gifts--only to have them stolen by little six-legged thieves. What a waste! But then a strange thought dawned within me. What if the ants themselves were the "household spirits" to whom the offerings were being made?

The idea became less strange as I pondered the matter. The family compound, like most on this tropical island, had been constructed in the vicinity of several ant colonies. Since a great deal of household cooking took place in the compound, and also the preparation of elaborate offerings of foodstuffs for various rituals and festivals, the grounds and the buildings were vulnerable to infestations by the ant population. Such invasions could range from rare nuisances to a periodic or even constant siege. It became apparent that the daily palm-frond offerings served to preclude such an attack by the natural forces that surrounded (and underlay) the family's land. The daily gifts of rice kept the ant colonies occupied--and, presumably, satisfied. Placed in regular, repeated locations at the corners of various structures around the compound, the offerings seemed to establish certain boundaries between the human and ant communities; by honoring this boundary with gifts, the humans apparently hoped to persuade the insects to respect the boundary and not enter the buildings.

Yet I remained puzzled by my hostess's assertion that these were gifts for the spirits." To be sure there has always been some confusion between our Western notion of "spirit" (which so often is defined in contrast to matter or "flesh"), and the mysterious presences to which tribal and indigenous cultures pay so much respect. Many of the earliest Western students of these other languages and customs were Christian missionaries all too ready to see occult ghosts and immaterial spirits where the tribespeople were simply offering their respect to the local winds. While the notion of "spirit" has come to have, for us in the West, a primarily anthropomorphic or human association, my encounter with the ants was the first of many experiences suggesting to me that the "spirits" of an indigenous culture are primarily those modes of intelligence or awareness that do not possess a human form.

As humans we are well acquainted with the needs and capacities of the human body-we *live* our own bodies and so know, from within, the possibilities of our form. We cannot know, with the same familiarity and intimacy, the lived experience of a grass snake or a snapping turtle, nor can we readily experience the precise sensations of a hummingbird sipping nectar from a flower, or a rubber tree soaking up sunlight. Our experience may well be a variant of these other modes of sensitivity; nevertheless we cannot, as humans, experience entirely the living sensations of another form. We do not know, with full clarity, their desires or motivations-we cannot know, or can never be *sure* that we know, what they know. That the deer experiences sensations, that it carries knowledge of how to orient in the land, of where to find food and how to protect its young, that it knows well how to survive in the forest witbout the tools upon which we depend, is readily evident to our human senses. That the mango tree has the ability to create or bear fruit, or the yarrow plant the power to reduce a child's fever, is also evident. To humankind, these Others are purveyors of secrets, carriers of intelligence that we ourselves often need: it is these Others who can inform us of unseasonable changes in the weather, or warn us of imminent eruptions and earthquakes-who show us, when we are foraging, where we may find the best food or the best route back home. We receive from them countless gifts of food, fuel, shelter, and clothing. Yet still they remain Other to us, inhabiting their own cultures and enacting their own rituals, never wholly fathomable. Finally, it is not only those entities acknowledged by Western civilization as "alive," not only the other animals or the plants that speak, as spirits, to the senses of an oral culture, but also the meandering river from which those animals drink, and the torrential monsoon rains, and the stone that fits neatly into the palm of the hand.

Bali, of course, is hardly an aboriginal culture; the complexity of its temple architecture, the intricacy of its irrigation systems, the resplendence of its colorful festivals and crafts all bespeak the influence of various civilizations-most notably the Hindu complex of India. In Bali, nevertheless, these influences are thoroughly intertwined with the indigenous animism of the Indonesian archipelago; the Hindu gods and goddesses have been appropriated, as it were, by the more volcanic spirits of the local terrain.

Yet the underlying animistic cultures of Indonesia, like those of many islands in the Pacific, are steeped as well in beliefs often referred to by anthropologists as "ancestor worship." Some may

argue that the ritual reverence paid to one's long-dead human ancestors, and the assumption of their influence in present life, easily invalidates my contention that the various "powers" or "spirits" that move throughout the discourse of indigenous, oral peoples are ultimately tied to nonhuman (but nonetheless sentient) forces in the enveloping terrain.

This objection trades upon certain notions implicit in Christian civilization, such as the assumption that the "spirits" of dead persons necessarily retain their human form, or that they reside in a domain entirely beyond the material world to which our senses give us access. However, many indigenous, tribal peoples have no such ready recourse to an immaterial realm outside earthly nature. For most oral cultures, the enveloping and sensuous Earth remains the dwelling place of both the living *and* the dead. The "body"--human or otherwise--is not yet a mechanical object. It is a magical entity, the mind's own sensuous aspect, and at death the body's decomposition into soil, worms, and dust can only signify the gradual reintegration of one's elders and ancestors into the living landscape, from which all, too, are born.

Each indigenous culture elaborates this recognition of metamorphosis in its own fashion, taking its clues from the particular terrain in which it is embedded. Often the invisible atmosphere that animates the visible world--the subtle presence that circulates both within us and around all things--retains within itself the spirit or breath of the dead person until the time when that breath will enter and animate another visible body--a bird, or a deer, or a field of wild grain. Some cultures may cremate the body in order to more completely return the person, as smoke, to the swirling air, while that which departs as flame is offered to the sun and stars, and what lingers as ash is fed to the dense earth. Still other cultures, like some in the Himalayas, may dismember the body, leaving certain parts where they will likely be found by condors or consumed by leopards or wolves, thus hastening the reincarnation of that person into a particular animal realm within the landscape. Such examples illustrate simply that death, in tribal cultures, initiates a metamorphosis wherein the person's presence does not "vanish" from the sensible world (where would it go?) but rather remains as an animating force within the vastness of the landscape-whether subtly, in the wind; more visibly, in animal form; or even as the eruptive, ever-to-be-appeased wrath of the volcano. "Ancestor worship" in its myriad forms, then, is ultimately another mode of attentiveness to nonhuman nature; it signifies not so much an awe or reverence of human powers, but rather a reverence for those forms that awareness takes when it is not in human form, when the familiar human embodiment dies and decays to become part of the encompassing cosmos.

This cycling of the human back into the larger world ensures that the other forms of experience we encounter, whether ants, or willow trees, or clouds, are never absolutely alien to ourselves. Despite the very obvious differences in shape, ability, and style of being, they remain at least distantly familiar, even familial. It is, paradoxically, this perceived kinship or consanguinity that renders the difference, or otherness, so eerily potent.[1]

My exposure to traditional magicians and seers was gradually shifting my senses; I became increasingly susceptible to the solicitations of nonhuman things. When a magician spoke of a power or "presence" lingering in the corner of his house, I learned to notice the ray of sunlight that was then pouring through a chink in the wall, illuminating a column of drifting dust, and to realize that that column of light was indeed a power, influencing the air currents by its warmth, and indeed influencing the whole mood of the room; although I had not consciously seen it before, it had already been structuring my experience. My ears began to attend, in a new way, to the songs of birds--no longer just a melodic background to human speech, but meaningful speech in its own right, responding to and commenting on events in the surrounding Earth. I became a student of subtle differences: the way a breeze might flutter a single leaf on a tree, leaving the others silent and unmoved (had not that leaf, then, been brushed by a magic?); or how the intensity of the sun's heat expresses itself in the precise rhythm of the crickets. Walking along the dirt paths, I learned to slow my pace in order to feel the difference between one nearby hill and the next, or to taste the presence of a particular field at a certain time of day when, as I had been told by a local *dukun,* the place had

a special power and proffered unique gifts. It was a power communicated to my senses by the way the shadows of the trees fell at that hour, by smells that only then lingered in the tops of the grasses without being wafted away by the wind, by other elements I could only isolate after many days of stopping and listening.

Gradually, then, other animals began to intercept me in my wanderings, as if some quality in my posture or the rhythm of my breathing had disarmed their wariness; I would find myself face to face with monkeys, and with large lizards that did not slither away when I spoke, but leaned forward in apparent curiosity. In rural Java I often noticed monkeys accompanying me in the branches overhead, and ravens walked toward me on the road, croaking. While at Pangandaran, a nature preserve on a peninsula jutting out from the south coast of Java ("a place of many spirits," I was told by nearby fishermen), I stepped out from a clutch of trees and found myself looking into the face of one of the rare and beautiful bison that exist only on that island. Our eyes locked. When it snorted, I snorted back; when it shifted its shoulders, I shifted my stance; when I tossed my head, it tossed its head in reply. I found myself caught in a nonverbal conversation with this Other, a gestural duet with which my reflective awareness had very little to do. It was as if my body were suddenly being motivated by a wisdom older than my thinking mind, as though it was held and moved by a logos, deeper than words, spoken by the Other's body, the trees, the air, and the stony ground on which we stood.

I returned to North America excited by the new sensibilities that had stirred in me--my newfound awareness of a more-than-human world, of the great potency of the land, and particularly of the keen intelligence of other animals, large and small, whose lives and cultures interpenetrate our own. I startled neighbors by chattering with squirrels, who swiftly climbed down the trunks of trees to banter with me, or by gazing for hours on end at a heron fishing in a nearby estuary, or at gulls dropping clams on the rocks along the beach.

Yet very gradually, I began to lose my sense of the animals' own awareness. The gulls' technique for breaking open the clams began to appear as a largely automatic behavior, and I could not easily feel the attention they must bring to each new shell. Perhaps each shell was entirely the same as the last, and no spontaneous attention was necessary.

I found myself now observing the heron from outside its world, noting with interest its careful high-stepping walk, and the sudden dart of its beak into the water, but no longer feeling its tensed yet poised alertness with my own muscles. And, strangely, the suburban squirrels no longer responded to my chittering calls. Although I wished to, I could no longer engage in their world as I had so easily done a few weeks earlier, for my attention was quickly deflected by internal verbal deliberations of one sort or another, by a conversation I now seemed to carry on entirely within myself. The squirrels had no part in this conversation.

It became increasingly apparent, from books and articles and discussions with various people, that other animals were *not* as awake and aware as I had assumed, that they lacked any real language and hence the possibility of thought, and that even their seemingly spontaneous responses to the world around them were largely "programmed" behaviors, "coded" in the genetic material now being mapped by our scientists. Increasingly, I came to discern that there was no common ground between the unlimited human intellect and the limited sentience of other animals, no medium through which we and they might communicate and reciprocate one another.

But as the expressive and sentient landscape slowly faded behind my more exclusively human concerns, threatening to become little more than an illusion or fantasy, 1 began to feel--particularly in my chest and my abdomen--as though I were being cut off from vital sources of nourishment.

Today, in the "developed world," many persons in search of spiritual self-understanding are enrolling for workshops and courses in "shamanic" methods of personal discovery and revelation. Meanwhile psychotherapists and some physicians have begun to specialize in "shamanic healing techniques." "Shamanism" has come, thus, to denote an alternative form of therapy; the emphasis,

among these new practitioners of popular shamanism, is on personal insight and curing. These are noble aims, to be sure, yet they are, I believe, secondary to *and derivative from* the primary role of the indigenous shaman, a role that cannot be fulfilled without long and sustained exposure to wild nature, its patterns and vicissitudes. Mimicking the indigenous shaman's curative methods without knowledge of his or her relation to the wider natural community cannot, if I am correct, do anything more than trade certain symptoms for others, or shift the focus of disease from place to place within the human community. For the source of stress lies in the relation between the human community and the living land that sustains it.

Sadly, our culture's relation to the animate Earth can in no way be considered a reciprocal or balanced one: with thousands of acres of nonregenerating forest disappearing every hour, and hundreds of our fellow species becoming extinct each month as a result of our civilization's excesses, we can hardly be surprised by the amount of epidemic illness in our culture, from increasingly severe immune dysfunctions and cancers, to widespread psychological distress, depression, and ever-more-frequent suicides, to the growing number of murders committed for no apparent reason by otherwise coherent individuals.

From an animistic perspective, the clearest source of all this distress, both physical and psychological, lies in the violence uselessly perpetrated by our civilization on the ecology of the planet; only by alleviating the latter will we be able to heal the former. This may sound at first like a simple statement of faith, yet it makes eminent and obvious sense as soon as we acknowledge our thorough dependence upon the countless other organisms with whom we have cvolved. Caught up in a mass of abstractions, our attention hypnotized by a host of human-made technologies that only reflect us back upon ourselves, it is all too easy for us to forget our carnal inherence in a more-than-human matrix of sensations and sensibilities. Our bodies have formed themselves in delicate reciprocity with the manifold textures, sounds, and shapes of an animate Earth; our eyes have evolved in subtle interaction with other eyes, as our ears are attuned by their very structure to the howling of wolves and the honking of geese. To shut ourselves off from these other voices, to continue by our life-styles to condemn these other sensibilities to the oblivion of extinction, is to rob our own senses of their integrity, and to rob our minds of their coherence. We are human only in contact and conviviality with what is not human. Only in reciprocity with what is Other do we begin to heal ourselves.

1. The similarity between such a worldview and the emerging perspective of contemporary ecology is not trivial. Atmospheric geochemist James Lovelock, elucidating the Gaia hypothesis, insists that the geologic environment is itself constituted by organic life and by the products of organic metabolism. In his words, we inhabit "a world that is the breath and bones of our ancestors." "Gaia: The World as Living Organism," New Scientist (December 18, 1986), 25-28.