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THE UNIVERSITY OF ALBERTA

The Stream: Toward Eco-poetic Education

by

George F. L. Newton

A THESIS

**SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION.**

Department of Educational Psychology

Edmonton, Alberta

Spring, 1989



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The rivers are our brothers. They quench our thirst. They carry our canoes and feed our children. So you must give to the rivers the kindness you would give any brother.

-Chief Seattle

THE UNIVERSITY OF ALBERTA
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The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled *The Stream: Toward Eco-poetic Education* submitted by George F. L. Newton in partial fulfillment of the requirements for the degree of Master of Education.

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To the memory of Three Rivers.
And to the humble folk who knew them
and fought to preserve a beauty
that never again will be.

ABSTRACT

The intent of this inquiry was threefold: to describe the main perceptions of river writers, those who have enjoyed rivers and written about their experience; to evaluate their perceptions for ecological soundness; and then to draw from the river writers' texts key factors behind the acquisition of their perceptions.

The inquiry begins with an interpretation of the environmental crisis, which is seen as being a crisis of the human spirit. This is followed by a discussion of the phenomenological-hermeneutic approach taken to the texts.

The examination of riverine literature revealed perceptual themes which describe or intimate beauty, wonder, affection, imagination, connectedness, sacredness, flow, poeticizing, and a relatedness between rivers and human life.

Three of the core perceptions were re-examined and shown to be ecologically sound. A fourth ecologically-sound theme, prizing pleasures of the heart, underlies and informs the others.

Finally, the river writers were situated within the larger community of eco-poets, those committed to celebrating earthly manifestations of the spirit. Then the texts of both eco-poets and river writers were examined for likely factors contributing to the acquisition of eco-perceptions. Wild places, passive and active poetic practices, enthused mentors, and solitude were found to be basic to the education of eco-poetic perceptions.

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And humble gratitude to the stream for lighting the way.

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The Stream

Southwest of here a hundred miles or so, in the rolling country before the mountains, a cold spring rises. Its flow is steady, and in confluence with water from neighbouring springs forms a perennial stream. The stream meanders southeasterly, looping through flowered meadows and willows and spruce forest, rippling beneath grassy banks and through deep pools, and then, eleven miles from its source, slips quietly into the Raven. Those who know the creek usually refer to it as Stauffer, though it goes by other names. My friends and I call it 'the stream'.

My relationship with the stream is young, about a decade, as long as I've lived in Alberta. My first awareness of the stream came in vivid word-pictures painted by a fisherman recounting his personal experiences of angling the West. He was teaching a night class of beginners how to tie flies; and while we tied flies he told stories. Already an ardent fisherman, but one who had never fly-fished, I was enthralled by his images and the prospect of such bountiful sport. Many of his best stories told of a fine spring creek, renowned for its miles of superb fly-fishing water and abundance of wily browns. It wasn't long before I was in the picture myself, mentally, wading up-stream and casting to big trout sipping flies under high, flowered banks. Soon we'd tied our last motley flies and our raconteur's tales had ended. I was all primed for my first raid on Stauffer. When spring arrived I threw my gear in the truck and headed off to the stream.

My first day on Stauffer I remember well. It was early June about ten years ago. A typical prairie summer day--sunny, hot and dry, white

clouds in a cobalt sky, and a steady breeze rippling over the land. The road map lay open beside me and showed that within the next few miles this secondary highway, actually a dusty gravel road, would cross the fabled creek. I was looking for a dip in the land and a bridge. As the downgrade in the road sharpened I eased my foot off the gas, for I didn't know how big the stream was and didn't want to miss it, as some streams are choked by willows and cross under roads in small culverts. Soon the stands of pine and poplar gave way to clumps of willow and I found myself in a shallow valley. I could see ahead a narrow wooden bridge. It was inconspicuous-looking, not what I'd expected. I looked around for a sign naming the spot. There was nothing, save the breeze and the quiet nodding of willows. Anxiously, I eased my truck onto the shoulder and walked over to the bridge. For the first time I peered down into the stream.

Glassy water, two feet deep and clear, slipped through a sunlit river bed. Long prisms of light danced across the pebbles. Mid-stream, a flickering shadow caught my eye. It was cigar-shaped. I looked above the shadow and could see through the reflections a small trout holding in the current. The sun streamed down. I watched the trout in the current, and felt myself relax, and be drawn, as if into a stream. This was the place. I eased my eyes away and looked downstream.

The water was superb. The long downstream reach, ten to twenty feet wide, meandered between stable, grass-covered banks, which appeared to be deeply undercut, ideal cover for trout. Along the stream's edge, peppered by the rich cadmium yellow of marigolds, dark clumps of willow stretched low over the water. Their branches and shade provided good

trout cover. And the long, weed-lined channels and deep pools suggested a classic fly-fishing stream. Occasionally, a rising trout would ring the surface. Because I had come to fish, rather than contemplate nature, I walked back to the truck, pulled on my waders, and soon found myself standing knee-deep in a riffle, casting a fourteen Adams upstream to a feeding brown.

I fished the whole day and have never had a better day's fishing. Yet in truth I didn't catch a thing. This paradox is easily explained. As each hour slipped into the next, and my upstream reconnaissance revealed more and more lovely pools, I began to fall in love with the place. Although I knew some fly-fishing theory, I was without experience and unable to hook even one fish, yet I was not discouraged. Each stretch of fine water beckoned me to wade on, and around each grassy bend I was greeted by another rich 'streamscape', as I later came to call these riverine 'motifs' in my painting of them.

Sap-green willows rocked to and fro in the gusty breeze. Sheltered below them, water swirled between banks covered in clover, pale violets, and mint. Above the obsidian surface dragonflies cruised, iridescent in the midday sun. They'd stop and hover above the stream, and when another dared to intrude, would spar until one was driven off. Swallowtails fluttered in the meadows against a soft, steady drone of bees, flies and wasps. Kingfishers, in blue flashing arcs, scooped dace from the shallows. Around one bend a muskrat kit, its mouth full with green shoots, paddled by to a downstream destination. Around another, a big heron fed in the shallows until disturbed by my oncoming presence. In a graceful sweep of grey-blue wings he pulled himself out of the

water, and with a few more sweeps disappeared behind a stand of ancient spruce. In the channels, pools, and backeddies browns sipped on emerging duns. And from far off I heard faintly the distinctive 'keeeer, keeeer' of a redtail. Looking into the hot blue above I spied a pair of them very high, circling upwards on a thermal. The whole place danced. I had never seen such lovely water.

In late afternoon I found myself way upstream. Exhausted, I took off my waders and lay down on the bank. It was still hot and sunny. I stretched out on the grass and relaxed to the melodies and rhythms playing along the stream. The redolence of mint filled my head, and the breeze rustling the grass blew right through me.

Soon the purr of life along the creek had lulled me into reflection. It didn't matter that I hadn't hooked a fish; I knew I would return. Throughout the day the stream and its meadows had shown me exotic pleasures. The coppery sun dipped toward the horizon. I roused myself from slumber and, hooked on the stream, drove back to the city.

Over the years since that seminal day my relationship with the stream has deepened. However, becoming hooked on the stream was the beginning of me becoming unhooked on fishing, though occasionally I still like to wet my line. At first, dominated by the need to fish, trips to Stauffer addressed that need. Usually I fished with my friend Dave or my son Geoff. All of us were engrossed and spent a lot of time learning to 'read the water' and improving the 'presentation' of our flies. Like 'good sportsmen' we practiced 'catch and release' etiquette, and, on occasion, found the courage to fish 'barbless'. Yet,

unexpectedly, as my fishing skills improved and my knowledge of the stream increased, my urge to fish declined. I found myself spending more time just enjoying life along the stream, and listening to the ripple of the currents. Eventually, sitting quietly on the bank became a favoured practice.

A few summers after my initial encounters with the stream, and wanting to spend more time there than our weekend jaunts allowed, Dave, Geoff and I arranged to camp there for a summer. We pitched our tents beneath aspen on a hill overlooking the stream, and indulged ourselves. We fished. And we painted. We swam and snorkelled and hiked. We drew water and chopped wood, cooked and ate fireside meals. We slept beneath the stars, and spent countless lazy hours along the river. As the summer days idled on, we settled into the disciplines and joys of living close to the earth. Camped there for a season, we learned the natural rhythms and the changes passing days bring. Our nearness to the earth and the elements, and our unrushed sojourn deepened our love for the stream. In late August, we broke camp. Each of us left feeling the great solitude which is nature's alone.

To this day I continue my visits to the stream. During spring and summer, and into the fall, I pass as many days there as I can. I own no land there, so dwell as a guest. Yet, when I'm camped on the hill by the stream and the sun is going down, and the valley is bathed in that gentle light so typical of prairie summer evenings, I know I'm home. The Saskatoon bushes on the rosy bluff below Jackson's meadow, with shadows gathering round the edges; the young aspen kindling pink in the sun's last rays; the coyotes' hoots and hollers up and down the valley;

the cool night air moving in across dampening fields; and a brilliant moon rising in an indigo sky--all these wonders remind me--I am their kin. Is there a higher knowledge? A better place? Earth is home. Here I belong.

CHAPTER I

BIRD'S EYE VIEW

Listen to the river sing sweet songs to rock my
soul...

-Robert Hunter

In this inquiry I would like to get a better understanding of what rivers know. Having spent time around them, and having read reports by others who have experienced them, I have a hunch 'river knowledge' may be valuable in finding and nurturing ways of living that are ecologically sound. The urgency of this task is fueled by our awareness that planet Earth, once a winsome and healthy home, is severely threatened by escalating ecosystem degradation and, in many cases, outright ecosystem collapse.

Given that the environmental crisis originates with humans, it follows that attempts to ameliorate the crisis must consider this fact. A start is made by acknowledging that how we see the world and our place in it strongly influences how we treat the world. Implicit in this understanding is the assumption that people can and do perceive differently. Psychological research bears this out. Given that some perceptions are healthier than others, our quest for ecologically sound lifestyles requires that we discover viable perceptual alternatives.

Based on some familiarity with them, I have identified a group of people who might help us in our search for perceptual alternatives. I call these persons river writers. These are folk, living or dead, who have been moved by and written about their river experiences. Their works intimate that rivers tell them things they can hear nowhere else. What is more, to these writers, river knowledge is most salubrious. My experience of rivers bears this out.

Although the best way to know rivers is to encounter them first hand, much can be gleaned from reading about others' experiences. As your guide on this tour of river literature, I intend to accomplish three tasks. First, I will describe some of the river writers' perceptions manifesting in their texts. Following this I will show how these riparian perceptions are ecologically sound. Lastly, I will discuss how we can nurture perceptions like these in ourselves. Once the tour is completed we'll have a better understanding of what rivers know, and informed by them we may move toward living in peace with Gaia.

Chapter II, *Muddy Waters* describes the schism which engendered this inquiry. A look at the environmental crisis shows it to be essentially a crisis of the human spirit.

Chapter III, *Intimations*, defines what I mean by river writers and their perceptions. Here we look at my favourite bias and how it plays in our approach to riparian perceptions. A brief discussion of the phenomenological model of perception, hermeneutics, and the

relationship of art to truth paves the way for looking at perceptual themes.

Chapter IV, Places of Current, describes some major perceptual themes of river writers. Annie Dillard, Gretel Ehrlich, John Muir, Edward Abbey, Henry David Thoreau, Roderick Haig-Brown, are a few of the writers who contribute to the perceptual streams.

Chapter V, Appreciation, evaluates the riparian perceptions in terms of their ecological soundness. Connectedness, sacredness, poetics, flow, among others, are shown to be inherently sound. Their vitality is ensured by the pleasure they afford.

Chapter VI, Eco-poetic Nurturing, situates river writers within the larger community of eco-poets. A brief discussion on the nurturing of eco-perceptions concludes the inquiry.

CHAPTER II

MUDDY WATERS

A river ought to flow freely, without dams. If it is stopped, it turns stagnant and becomes poisoned.

-Ramakrishna

Our perceptions of the world and our place in it have a strong impact on how we treat that world. Evernden (1985) summarizes this understanding well:

Environment is never isolated from belief, and a discussion of environmentalism is inevitably also an account of the relationship of mind to nature -- what Paul Shepard once called 'the central problem of human ecology.' Our perceptions and expectations of environment are inseparable from our moral commitment to particular beliefs and institutions. (p. x)

Many of our current perceptions of the world are faulty, destructive, and self-defeating. Consequently, reversing the environmental crisis will require finding perceptual alternatives.

Like anyone studying the environmental crisis, I have my sense of what the core issues are. Here a summary of the most telling of these is given. Because this inquiry grows out of threats to wild areas dear to me, I preface the summary with a sketch of the schism which engendered this inquiry.

Existential Schism

Thrownness

In this sketch I draw on Heidegger's notion of "thrownness". According to Heidegger, "thrownness" is a basic, inescapable condition of each person's existence. In simple terms it means each person finds him or herself 'thrown' into an existence that he or she did not choose (Solomon, 1972). For example, I did not choose to be a white, male, English-speaking Canadian, living in the twilight years of the second millennium A.D.; I was 'thrown' into these conditions. These obvious conditions of my "thrownness", save for the last one, have little bearing on my research interest. However, two others in particular do bear heavily on it. The schism between them was the originary impetus of this inquiry.

Thrown into a World of Natural Goodness

The first condition of my thrownness is something I have been immersed in and aware of all my waking life. I am aware of being present in a world which in all its variegated phenomena is mysteriously alive, ever-changing, thunderingly beautiful, and, through these features, fundamentally right. Over the years I have been appreciative of nature's bounty, but only within the last decade has the mystery and beauty inherent in nature become the touchstone of my epistemology. When I want to get in touch with what is most important in life, to know again and be reminded of just one thing that is true, right, and good, I turn to things wild, those things, as Wendell Berry puts it, "not of our

making". When I want to immerse myself in such providence, I camp by the stream for a week or so.

My intuition of nature's goodness became conscious as a function of experience and education. Formal education seems to have had little to do with this. More significant were plentiful first-hand outdoor experiences Mum and Dad provided for us as children. Not unimportant were our parents' attitudes of love and reverence for the natural world. It was these guided encounters with nature, from infancy to late adolescence, which provided the formative raw material for my knowledge and affirmation of the wild world's rightness.

Also nurturing my awareness of nature's goodness was my finding in literature others who had had, and written about, experiences similar to my own. In retrospect, there was a kind of dialogue between my own experiences and the recorded experiences of others. By reading various works, Thoreau's Walden is one that comes to mind, my experiences took on new dimensions, and were refined. Through dialoguing with others I have come to see myself as a member of two distinct yet intertwined communities. My life-long sense of belonging within nature's community has become an irrevocable certainty. Another community I feel close to are those who have captured in words their wilderness experiences. Although not a writer per se, I enter their circle when I hear their words.

So while there is no substitute for first-hand encounters of wildness, reading or hearing about others who have traversed similar territory is instrumental to one's intimations of wilderness knowledge, including 'the knowing of rivers'.

To summarize my throwness into this first condition, due essentially to the right kind of education which ensured I had lots of close contact with wildness, I was allowed to see the natural world for what it is, a place of mystery and beauty, and a place where, life, through itself, and seemingly without effort, gives birth to more of itself. Everywhere I look in nature this creative becoming, mysterious as it is, proclaims life's fundamental rightness. This aspect of my throwness humbles and delights.

Thrown into a World of Human Destruction

Erupting into consciousness recently is my awareness that this wondrous planet Earth, home and harbour to all life, is, as Gary Snyder says, ". . . on the verge of being totally trashed . . ." (1984, p. 29). Not only have I been thrown into a world of thundering beauty, I have been thrown at the same time into a world of unprecedented destruction.

Two thousand years ago Plato bemoaned the deforestation of the hills around Athens, so ecosystem destruction is not new. However, only in the last three decades, since the publication in 1962 of Rachel Carson's Silent Spring, have we learned that humans are causing widespread, severe, and in many instances, irreparable ecosystem destruction. In fact, a growing number of ecologists think that unless we quickly change our ways, we will be the first species on Earth to witness its own extinction.

As I write and ponder this, something inside me rejects such doomsaying. My heart, innocent as it is, tells me it cannot be so. Who among us can fathom our extinction? It seems absurd. But perhaps I'd

better think twice on this, for these are extraordinary times. Because the potentially grim years ahead are hard to fathom, it is important we not gloss over or spurn too quickly ecologists' thoughts on these critical issues. I find their words sobering. A brief sampling should suffice.

The recently released Science Council of Canada report Water 2020 states:

Evidence of a looming environmental crisis indicates a scale and depth of disaster far exceeding any met by earlier generations. The nuclear age holds the potential for total destruction. A more fundamental threat yet is the accelerating pressure of human activities on the natural resources and ecosystems on which life depends. (1988, p. 23)

Ecologist Les Kaufmann (1986) warns about the escalating loss of biodiversity:

We are part of a common fabric of life. Our survival is dependent on the integrity of this fabric, for the loss of a few critical threads could lead to a quick unraveling of the whole. We know that there have been previous mass extinctions, through which some life has survived. As for our own chances of surviving this mass extinction, there can be no promises. If the Grim Reaper plays any favorites at all, then it would seem to be a special fondness for striking down dominant organisms in their prime. . . . lest history bear false witness and barring some serious conservation efforts on our part, this mass extinction could well be the last one we will ever know about. (p. 4)

Ecologists Anne and Paul Ehrlich, in their recent book Earth (1987), emphasize the same ironic theme of humans witnessing their own extinction. Anyone familiar with the recent literature on ecosystem destruction will recognize such warnings as typical.

Within this general propensity to destroy environments, specific acts of destruction planned or happening now, here in Alberta, are

particularly distressing. For example, the jamming of the Oldman River (Three Rivers) at Pincher Creek in southern Alberta, or the proposed highway through Howse Pass, or the massive clear-cutting of Alberta's best forests scheduled to begin almost immediately, are a few. Each of these projects will cripple or destroy forever biologically rich and healthy ecosystems. We carry on as if we'd not yet heard about the escalating global collapse of ecosystems. At a time when ecologists world-wide are calling for a moratorium on the destruction of ecosystems--the Brundtland Report (1987), in fact, calls for a threefold increase in protected natural areas--these planned acts of ecosystem destruction in our own backyard frighten and anger me.

Having sketched these two conditions of my throwness, the schism between them is apparent. On the one hand I am aware of living on a profoundly wondrous planet. Life amazes at every turn! On the other hand I am faced with the unnerving fact that in our pursuit of the 'good life', we of the human tribe are destroying the very life in which we are so mysteriously borne.

The Paradigm of Aggravated Entropy

As a way of helping me think about these two conditions, and toward reconciling the schism between them, I want to give them each a name, a kind of paradigmatic label encapsulating the essence of each. The first condition of being 'thrown into a world of natural goodness' will be named when I evaluate the perceptions of river writers in Chapter V. Here a name is given to the second condition of my throwness.

Recall that this condition, which we know commonly as 'the environmental crisis', is characterized by the still-escalating destruction of life on Earth. This destruction, whether it occurs directly, for example in the razing of the rainforests and the extinction of species therein, or indirectly, as in the depletion of ozone as a result of chlorofluorocarbon pollution, amounts to the same thing, the irrevocable loss of non-renewable resources. 'Resources' as I use it here is not restricted to the material realm. Not only are we losing ecosystems, biodiversity, minerals, topsoil, and fresh flowing water, but we are losing also the traditional knowledge and wisdom that for millennia sustained human populations. For example, with more farmers each year being forced off the land we are losing valuable sources of information about sustainable agriculture.

The destruction means we are losing, forever, the very stuff making living possible, and, ultimately, enjoyable. In their discussion of life and its foundations, ecologists Birch and Cobb (1981) make a crucial point: ". . . of all physical structures, those which produce life are the most fragile. They are built against the tendency of all things, when left to themselves, to decay" (p. 106).

The "tendency of all things . . . to decay," is recognized in scientific circles as the Second Law of Thermodynamics, or the Entropy Law. This law states ". . . that in an isolated system available matter-energy is continuously and irrevocably degraded into the unavailable state" (Georgescu-Roegen, 1977, p. 266). Entropy is a relative index of the unavailable matter-energy in a system. The higher the entropy, the higher the disorder, and the less available is free, or

useable matter-energy (low entropy). Birch and Cobbs' (1981) "all things" is here equatable with the universe, whose general tendency is to transformation from a state of low entropy (order) to a state of high entropy (disorder).

On Earth, working against this universal tendency toward greater entropy, we have a miraculous exception, called life. Through various biological processes, working over billions of years, life on Earth has been building up a store of negative entropy. Metaphorically, negative entropy is like 'capital' deposited in a bank account. Rather than living off the interest, renewable resources, humans are squandering the capital, non-renewable resources.

This general human proclivity to squander the planet's resources yields an appropriate name for this condition. I borrow generously from economist Georgescu-Roegen, who says:

. . . in addition to the natural entropic degradation, dissipation of matter and energy is aggravated by all consumer creatures, especially by humans. Topsoil everywhere is washed out into the oceans mainly as a direct consequence of the Entropy Law. However, by consuming food or burning wood, for example, far away from where they have been produced, man heightens immensely the dissipation of both matter and energy. (1977, p. 268)

So, while all organisms, through consumption, contribute to the increase of entropy, humans are the grand aggravators of this tendency. The name I give to this condition of my throwness is The Paradigm of Aggravated Entropy.

As I reflect upon my throwness into a world where the bulk of humans carry on like agents of entropy, it becomes clear to me that the environmental crisis is, as Evernden (1985) and others argue, a crisis

in human consciousness. Georgescu-Roegen (1977) highlights the radical connection between consciousness and entropy: ". . . entropic transmutation occurs in the same direction as the stream of our consciousness, i.e., parallel with our lives" (p. 267). Reducing the flow of entropy then requires changing consciousness. A look at how human consciousness presently aggravates entropy will pave the way for looking at perceptual alternatives.

Spiritual Crisis

Many different perspectives on the root causes of the environmental crisis exist. Informed by some of these perspectives, the crisis can be seen in essence to be a failure of the human spirit. For various reasons, we no longer 'see' or experience the divine presence. Bancroft (1987) expresses well the sense of the crisis:

. . . we have removed the spiritual from nature, placing it far away in an abstract 'God', and in its place we have invented new deities--science, technology, and our physical well-being. And because we no longer see any part of nature or any condition of it as sacred, we poison all its resources. (p. 2)

Wendell Berry agrees, writing that

. . . the great disaster of human history is one that happened to or within religion: that is, the conceptual division between the holy and the world, the excerpting of the Creator from the creation. (1970, p. 6)

There is wide agreement among scholars that indeed this is our legacy (Barrett, 1986; Berman, 1984; Capra 1982; Kohak, 1984, 1986; Merchant, 1980; to name a few). Where once we had the ". . . possibility of a direct experience of the divine . . ." (Bancroft, p. 2), today " . . .

we know everything with our minds and little remains of wonder to us" (p. 35).

That we no longer experience the sacred is rooted in the problem of human consciousness. Biological and cultural dimensions of consciousness are implicated in our divorce from reality and the concomitant despoilation of Earth.

Biological Influences

In their excellent New World New Mind (1989), Ornstein and Ehrlich document why the human mind of today is an anachronism. They argue that prehistoric human perceptual selectivity, while crucial for survival hundreds of millennia ago, is inadequate to the challenges of modern living:

Hundreds of thousands or millions of years ago, our ancestors' survival depended on a large part on the ability to respond quickly to threats that were immediate, personal, and palpable: threats like the sudden crack of a branch as it was about to give way or the roar of a flash flood racing down a narrow valley

Those are not threats generated by complex technological devices accumulated over decades by unknown people half a world away. Those are not threats like the slow buildup of carbon dioxide from auto exhausts, power plants and deforestation; not threats like the gradual depletion of the ozone layer . . . (p. 7)

Because the human mind has not kept up with the cultural realities of the modern world, our tendency is to attend only to "dramatic" stimuli. We ignore " . . . what is going on constantly, and . . . respond quickly to sudden shifts, to emergencies, to scarcity, to the immediate and the personal, to "news" (p. 93).

Ornstein and Ehrlich (1989) go on to say that our 'old minds' make us

. . . especially susceptible to anyone who can exploit the parochial focus of the old mind. In the modern world that focus leads to the vulnerability to terrorism, to brutality spreading as a result of watching television, and to the election of incompetent politicians who look good and sound good and thus make us feel good. But its focus leads to the slighting of the hazards of acid rain . . . desertification, and other unprecedented perils approaching too gradually to trigger our "fight-or-flight" responses. (p. 114)

Recalling the recent efforts of the American and Soviet coast guards to free three whales trapped by arctic ice, the truth in Ornstein's and Ehrlich's claim is verified. Millions of dollars were spent on the freeing efforts, while across the world people followed the scenario in the media. Meanwhile, toxins accumulate in the arctic, as they have for decades, unnoticed by the world and bypassed by the media. The toxins threaten to destroy another complex, rich, and still little-understood ecosystem.

As well as biological roots, cultural influences of misperception contribute to our mismatched perceptual selectivity.

Cultural Influences

The social mediation of our perceptions of reality is well-understood (Berger & Luckmann, 1966, Ornstein & Ehrlich, 1989). History, language, education, experience, attitudes, and beliefs colour our how we see the world. The unification of these factors in an individual, social group, or institution is called a world view, or paradigm. Two world views in particular contribute to the environmental crisis: scientism or scientific materialism, and economism.

Scientism

Since the birth of science in the seventeenth century, scientism, the belief that the method of science is the only way we can obtain knowledge, has been the dominant paradigm of the industrialized world. The contemporary critique of scientism (see Berman, 1984; Capra, 1982; and Merchant, 1980) highlights the shaky foundation of science, one built by two seventeenth century philosophers. Rene Descartes laid the groundwork with his distinction between *res cogitans* (mind) and *res extensa* (matter), and Francis Bacon provided the rationale, that knowledge acquired through science would eventually give the human race mastery over nature.

Capra (1976) highlights the conceptual distinction made by Descartes:

The birth of modern science was preceded and accompanied by a development of philosophical thought which led to an extreme formulation of the spirit/matter dualism. This formulation appeared in the seventeenth century in the philosophy of Rene Descartes who based his view of nature on a fundamental division into two separate and independent realms; that of mind (*res cogitans*), and that of matter (*res extensa*). The 'Cartesian' division allowed scientists to treat matter as dead and completely separate from themselves, and to see the material world as multitude of different objects assembled into a huge machine. (p. 21)

Not only did Descartes believe an objective world existed "out there", separate from the observer, but he assumed it was made up of discrete elements, like building blocks. The purpose of science was to discover these in order to know the whole (Capra, 1982; Merchant, 1980). Berman (1984) summarizes the legacy Bacon has left us:

[For Bacon] knowledge of nature comes about under artificial conditions. Vex nature, disturb it, alter it, anything--but do not leave it alone. Then, only then, will you know it.

The elevation of technology to philosophy has its concrete embodiment in the concept of the experiment, an artificial situation in which nature's secrets are extracted, as it were, under duress. (p. 17)

Bacon's methodological approach has been so successful in achieving mastery over the material world that science, particularly in highly industrialized states, is now valued above all other forms of knowledge acquisition. And 'facts' generated outside the authority of science are considered to have no worth. This means that knowing in ways other than the scientific are excluded from possibility. In turn, knowledge claims made about realities other than the material are seen as illegitimate, if not foolhardy. This results, as Berman (1984) aptly puts it, in "the disenchantment of the world." Sale's (1985) thesis is similar:

The ideas of the scientific paradigm transformed completely the attitudes of Western society toward nature and the cosmos. Nature was no longer either beautiful or scary but merely there, not to be worshipped or celebrated, but more often than not to be used, with all the ingenuity and instruments of a scientific culture . . . within the limits if needs be, heedless of limits if possible, but used--by humans, for humans. (p. 17)

While science has brought wealth and benefit to humankind, it has also muddied our consciousness. We no longer see the world as luminous and enchanting, or as a place with its own value and meaning, as most pre-literate peoples once did (Bancroft, 1987). Instead, we see the planet as a storehouse full of goods solely for our benefit. Any value things have, they have because of their value to us. Science and technology, concerned with the question 'how?', have usurped our wondering 'why?'. Quantity has eclipsed quality, and means overshadowed

ends. But another factor contributes to our misperceptions and muddled consciousness.

Economism Fueled by Greed

The major catalyst responsible for converting science to scientism is the seemingly unquenchable human desire to possess and consume more of anything money can buy. This is seen as healthy by citizens, businesses, and governments alike, for it supports the hallowed modern ideal of unlimited economic growth. Herman Daly (1977) says the 'paradigm of growth' is:

. . .the most universally accepted goal in the world. Growth appeals to capitalists, communists, fascists, and socialists as a basis of national power; it is an alternative to "sharing as a means of combating poverty." (p. 8)

In a penetrating assessment of business-as-usual after the Chernobyl disaster, Erazim Kohak (1987) notes that the hallmarks of capitalism are now aspired to in socialist countries. Recent Soviet initiatives show Gorbachev understands well that:

. . . the classic liberal combination of a nonrestrictive government with unrestricted private enterprise offers by far the most effective combination for the most ruthless exploitation of natural resources and ever-mounting individual affluence. . . . [Over both the capitalist and socialist European nations there] . . . lies the blanket of consensus: consumerism, ever greater, ever more wasteful, ever more ostentatious individual consumption, is what life is all about. (p. 8)

And in developing nations the oppressed are taking on the values of their oppressors, a process Marx called false-consciousness. Ecologist Kaufmann (1986) documents the dynamic at work:

Now the governments of the less developed nations, nearly all of which are situated in the tropics, feel that the same economic prosperity and economic wealth are due to them. They are ready to follow the path laid down by the developed world, and the world powers have been all too ready to help them along the way, taking most of the riches for themselves in the process. As a result, vast reaches of the tropical America, Asia, and Africa are now being drowned for hydroelectricity, logged for hardwoods and pulp, clear cut for cattle, and mined for ore. (p. 15)

No one is suggesting that economic growth is unhealthy. The Brundtland Report (1987) notes that development is crucial for the recovery of poverty-stricken Third World nations. The problem is the belief that economic well-being is the supreme end, and economics the most catholic of religions. Berry (1988) laments this primacy:

. . . it is astonishing, and of course discouraging, to see economics now elevated to the position of the ultimate justifier and explainer of all the affairs of our daily life, and competition enshrined as the sovereign principle and ideal of economics. . . . the economist announces pontifically to the press that "there will be some winners and losers"--as if that might justify and clarify everything, or anything. The sciences, one gathers, mindlessly serve economics, and the humanities defer abjectly to the sciences. All assume, apparently, that we are in the grip of economic laws, which are the laws of the universe. (p. 19)

Schneider and Londer (1984) provide a paradigmatic example of this mentality at work. Schneider relates his story of meeting the top executives of a major American food corporation. They were discussing the issue of soil erosion:

the manager expressed concern for these problems but said he he fired . . . if, for example, he placed priority on the consequences of future soil erosion ahead of their dividends for next year. . . .

"do you measure your success?" I asked.

"the growth of the corporation," he quickly replied,

my heads nodding around the room.

"why is that?" I wondered out loud to quizzical faces.

"That's the purpose of business," one executive suggested, "it's always been that way." (p. 482)

Schumacher (1973) attributes this attitude to the systematic cultivation of greed and envy which consequently creates ". . . a vast array of totally unwarrantable wants" (p. 37). What is so destructive, he writes, ". . . is the pretence that everthing has a price or, in other words, that money is the highest of all values" (p. 46). This leads to the suppression of qualitative distinctions vital to human health and freedom. Further, valuing everything in terms of the dollar ". . . takes the sacredness out of life, because there can be nothing sacred in something that has a price" (p. 45).

It is worth noting that traditional societies

. . . had a genuine fear of unbridled commerce and the accumulation of wealth. They saw it as anti-social and demonic, a corrosive effluvium of greed and self-aggrandizement that threatened to dissolve long-established ties based on mutual aid and community welfare. (Bookchin, 1987, p. 28)

As Bookchin correctly notes "This archaic insight has been proven out with a vengeance" (p. 28).

When we are 'thrown' into a society whose citizens believe, seemingly without exception, that economic growth and marketplace values are the foundation of well-being, it is difficult to believe otherwise. Yet many of us do. Many of us have intimations of worlds much finer than the consumptive yuppie existence that has become the ideal of modern marketplace societies. Toward reviving our sense of these finer worlds, we turn now to those who have known and loved rivers.

CHAPTER III

INTIMATIONS

no guru, no method, no teacher

-Van Morrison

As we approach river writers to learn about their perceptions and what rivers know, we need to ask ourselves some practical questions: Who are they? What is my pre-understanding of their perceptions? What do I expect to learn by looking at these? Considering the knowledge sought, what research approach is best? Are river writer texts the primary source? What are my biases as a researcher?

Researcher Bias

I have heard their 'voice' and know there is much to learn from rivers. Having read texts of those familiar with rivers I am aware that many of these folk express in words a 'river's knowing' better than I am able. By going to their texts, my experience and understanding of rivers is enriched. This is the general research strategy used in this inquiry. Through interpreting others' 'readings' of rivers, we glean a sense of what rivers know.

As a researcher then, my strategy is to refine and give fuller expression to my prejudices about rivers. Human science researcher Anthony Stigliano, building on the seminal work of Heidegger and Gadamer, says: "Rather than attempt to exclude our prejudices, we should make these moral and traditional antecedents the focal point of our

conversations with ourselves" (1986, p. 57). My central prejudgements about rivers hold them to be very beautiful, healthy, and knowledgeable entities. By studying closely the writings of others I expect these biases will be confirmed.

Another bias I value highly is a particular research method. I like it because it generates a certain kind of knowledge. An example of how one person uses the method will illustrate a number of points relevant to our pursuit of river writer perceptions.

In his fine book The Pathless Way, a study of John Muir's spiritual awakening in the wilderness of the Sierra Nevada, Michael P. Cohen talks about his own need as a researcher to use this method. Beneath the subtitle "Secondary Sources and Scholarship" Cohen writes:

A great danger awaits the student of the environmental movement in America: he may be too good a student, too well-read. Emerson had to remind the American scholar that "books are for the scholar's idle times. When he can read God directly, the hour is too precious to be wasted in other men's transcripts of their readings." So we are in danger of that failing today. I, for instance, have had to put on my pack and spend several days in the Grand Canyon of the Tuolumne to remind myself of what I am talking about. Even late in the season, when the oaks are flaming and the aspens are dropping their yellow leaves, one needs to sit by a campfire and remind oneself that the real research library of Yosemite lives in its canyons, rivers, lakes, meadows, forests, and mountains. It seems to me, now returned, that the chief difficulty we experience as humans is that we forget too easily. (1984, p. 275)

The Method

The method is deceptively simple. You leave behind the books, transcriptions, freeways, malls and TV's, all abstractions and artifacts of the human mind, and immerse yourself awhile in meadows, forests, and

rivers. Wilderness immersion is the method. It is a way to get in touch with your own heart and mind, away from the 'noise' of the masses.

Cohen goes into the wilderness to be reminded, which is why most people use the method. They are reminded, recreated, refreshed. Jesus went into the desert. Moses onto the mountain. Siddartha down to the river. All those who choose this method understand there are things one comes to know in the wilderness that cannot be found elsewhere. That is what Emerson was saying and what Cohen reiterates, and I, having researched similar wild settings, can vouch for the method. It works.

I have simplified 'the wilderness immersion method' to emphasize a point often forgotten in education. Instructions, methods, and techniques; books, maps, and models; teachers, mentors, and masters; all remain inert without the personal experience of living wilderness. While these secondary factors can play an integral role in wilderness recreation, they can never substitute for lived experience.

Sources

Another point to be drawn from the Cohen example is that you and I are reading a textual account of Cohen's wilderness experience, not living the experience itself. A distinction needs to be made. Primary sources can be defined as a person's experiences of wilderness as they are being lived. These experiences, in their poignancy, richness, and uniqueness, can be known in depth only by the person who experiences them. Secondary sources are a person's "readings" or interpretations or re-creations of wilderness experience in semiotic or aesthetic media like tapes, videos, books, journals, or paintings.

Primary and secondary sources of experience may be drawn upon when studying the perceptions of river writers. Key secondary sources are the texts by river writers. Other valuable secondary sources are texts by those who have been moved by wilderness, rather than rivers particularly, Cohen's text for example.

The primary source informing this thesis is my lived experience of rivers and streams. It is not accidental that the narrative "The Stream" opens this inquiry. While it is a symbolic statement: personal wilderness experience is prime, it is also more than that. "The Stream" was the first aspect of the inquiry to emerge. It was not until I had written a few drafts of it that I knew what I wanted to research. Wertz (1984) notes that ". . . the first moment of research is a preliminary identification of the phenomenon . . ." (p. 33). By going to Stauffer and recreating my experience in "The Stream", I was identifying the phenomenon.

Speaking Texts and Hermeneutic Circles

Another point to be drawn from Cohen's example has to do with recognizing the requisite phenomena in secondary sources. Cohen's passage gives intimations of at least one perception I am interested in. I know this by how the text speaks to me. Even as I mechanically typed out the quote a few minutes ago, toward premeditated ends, it spoke to me again. I felt something inside move. Inwardly, I intoned "Yes!" I know exactly what Cohen is taking about.

How is this possible? As I read Cohen's words describing these wild things, his words reach back into my experiences and resonate with

something there. Poignant memories are rekindled. Although I have never been to Yosemite or the Tuolumne, I've been in The Rockies when the cottonwoods are dropping their leaves, and sat before a fire, listening to elk bugle through the crisp fall air. Reading Cohen's words, I feel leaves tremble within. Indeed, when we may "read God directly" why do we spend so much time in abstractions, or otherwise bound by artifacts of our own design? I think we do "forget too easily", if we ever knew to begin with.

In this understanding shared by Cohen, Emerson, and I, we are a community, linked by direct "readings" of wilderness. Knowledge of the primacy of wilderness experience is our bond, our communal knowledge. My dialogue with wilderness and with those who have experienced it helps me think about and clarify experiences and meanings of my own. Through them I know better the phenomena that most interest me. Wertz (1984) summarizes this nicely:

The researcher . . . is in an apparently paradoxical position of having to understand her phenomenon prior to carrying out her research. Fortunately, the situation is not black and white, with the researcher in the dark. Rather she is entering a hermeneutic spiral, which has preceded her and is further enlightenable. Reflection on the . . . literature and the lived world itself, with priority going to the latter, is the means for identifying the phenomenon. (p. 34)

When Cohen reads Emerson and Muir he is entering a hermeneutic spiral. When Cohen puts a pack on his back and hikes into the Sierra Nevada he is giving, as Wertz advises, priority to "the lived world itself". Reading Cohen and Emerson, I too enter a hermeneutic spiral for reasons paralleling those Wertz has implied. I read to 'dialogue' with those who before me have cleared paths into the wilderness. This

is a territory and love we share; they are my mentors, I their apprentice. Reading their words revives the meaning and spirit of their vision. Their thoughts and insights dwell in me awhile. Entrusted with their words I am able through interpretation to illuminate them further, for my own edification or for others. The goal is to benefit from the knowledge and wisdom lying inert in the text. I may glean from the texts of river writers something I can pass on to those working to nurture ecological praxis.

Phenomenological Model of Perception

Cohen's passage can be used to help illustrate my understanding of perception relating to my reading of the river writers, an understanding informed by the model of perception used in phenomenological psychology. At the heart of the phenomenological model of perception is the understanding, based on the thought of Merleau-Ponty (1962), that ". . . the human being is connected to the world via perception" (Lowe, 1982, p. 1). Our deepest connections as subjects in a world are perceptual. Merleau-Ponty (1964) referred to this as 'the primacy of perception', and meant by it that ". . . the deepest levels of perceptual experience constitute the ground in which all "higher" mental phenomena (judging, remembering, reasoning) have their roots" (McConville, 1978, p. 105).

The prime feature of prereflective existence is a ". . . visible world [that] makes sense" (McConville, 1978, p. 95). Our everyday, prereflective existence--the world we live in prior to any reflection we bring to it--is meaningful. McConville describes this as ". . . a seen world which is shot through with perceptual meaning and in which the

perceiver is caught up behaviorally, affectively, and interpersonally" (p. 95). The world has meaning for us before we take up the question of meaning per se.

With this basic understanding of the psychological structure of the prereflective, meaning-filled world, the researcher frames his research. McConville says: "Phenomenology . . . takes meaning as the starting point. It is the *sine qua non* of perceptual experience, intrinsic to the interface of subject and world" (McConville, 1978, p. 102). In phenomenological psychology, it is nonsensical to talk about any one of these--perception, meaning, subject, world--without holding the others in mind. The essence of each is constituted in play with the others. To talk about one while ignoring the others distorts the richness of lived-experience. Lowe (1982) puts it succinctly: "There is no act of perception without a perceiver and a content of the perceived" (p. 171). Just as a river is a complement of water and bank, perception is a meaningful complement of subject and world.

Cohen's passage neatly embodies the phenomenological model of perception: meaning, and the bi-polar structure of subject and world. Cohen is the subject; his world is the Emerson text and the Sierra Nevada wilderness. In his dialogue with the world, Cohen appropriates and creates meaning. McConville summarizes nicely the essence of a perception:

The "chemistry" of these two poles is meaning. The world presents itself to the subject as meaning-ful: it invites his behavior, solicits his affect, and bears implications for his ongoing life projects. Within this dialogical context, the subject is defined complementarily as the being who invest that world with meaning: he attunes himself to and appropriates it, making it his milieu. The activity of

appropriation is what we refer to by the term "perception."
(McConville, 1978, p. 103)

In Cohen's appropriation of the flaming oaks and yellow aspen, the things he is "talking about" take on fresh meaning. The wilderness 're-minds', that is, brings a revitalized sense to them. He finds inspiration to carry on with a major life project, the researching and writing about Muir's spiritual awakening. In expressing his thoughts, insights, and perceptions, Cohen forges textual passages for others to read. His words are not automatic or arbitrary, but consciously chosen to capture and evoke what his perceptions were and are.

Cohen's text is not the perception per se, but a description of the perception--a trace, an intimation, a reflection--of his lived wilderness experience. In any meaningful texts we may intimate perceptions, the ways people see, approach, and appropriate their world.

River Writers and Riparian Perceptions

Poets

I have referred to authors I am interested in as "river writers", or, "those who have been moved by, and written about, their river experience". The picture can be broadened by using as a key the word 'moved'. William Pitt Root recognizes those who have been moved by experience as poets or witnesses:

There is no such thing as a poet who is an observer. People who are called poets are often observers, but in the act of committing true poetry they are witnesses--as many of us are. The witnessing of a poet happens to come out in words which other people sometimes hear or read. The witness is the committed observer--the one who will stand up and say not merely "I have seen" as in the court of law, but "I have been moved", as in the courts of heaven. (1984, p. 162)

River writers are witnesses. Having had profound experiences on or along rivers, they are moved to write poetically about their experience.

The meaning of poetics is rooted in *poiesis*, the archetype of life bringing forth out of itself new life. An act of poetics is the bringing forth of life, light, art, new meaning, into being. That's what artists do when they create. Poetics also means crafting in words. All writers need to play with language--words, syntax, punctuation, cadence, sound, tone, story, meaning, etc. By pushing the normal limits of these, breaking rules, using metaphor, creating images, poets attempt to capture and evoke their own deepest experiences. Phenomenologist David Levin says:

The truthful languaging of our experience can be nothing but poetic . . . this is how languaging naturally embodies and reflects the originary, creative spirit of the experiencing we have entrusted it to.

The essence of poetry is that it is moving. Poetic language is language with the power to touch and move us; language with the "ecstatic" power to open and transport us. (1983, p. 229)

Poetic work stands out (*ek-stasis*), and by its presence moves us into ecstasy. We experience a clarity of vision. A new reality opens before us.

A 'poetic work' encompasses all written forms of language used artfully, not only poems. Hence river writers may be poets, storytellers, fictioneers, journalists, autobiographers, or philosophers. They are united by their willful self-initiation into the pool of all those who have known and loved rivers, and written about them.

Rivers and Streams

Having described the core attribute of river writers as being witnesses, persons so moved by their experience they choose to write about it, the qualifying adjective 'river' needs to be examined.

Intuitively, if not experientially, we all have a sense of what a river is: a relatively large volume of water flowing naturally in one direction between two banks. This is a handy caricature of river, but the concept needs broadening, for a river is much more than that. River advocate Tim Palmer provides a richer picture:

Walk the easy way, downhill, and sooner or later you will probably come to a river. Then look around you at the high country. All of it drains to that low wet divider of the land, the place where waters and much more come together. Here is the home of wildlife, the route of explorers and a recreation paradise . . . rivers are the most extraordinary part of the land. (1986, p. 1)

In Palmer's view the watershed and all its inhabitants are implied in the word river. Many things "come together" at the river, suggesting their interconnectedness. In a recent conversation with wilderness preservationist Kevin Van Tighem, he told me of his new perspective on rivers:

It is still growing. Only recently did I realize that there is nothing which is not part of a river. Water and banks; vegetation and wildlife; geological formations and hydrological cycles, all are part of the watershed, including us. If you have to focus on one uniting aspect of the landscape, focus on the river. (personal communication, Sept. 11, 1988)

Both Van Tighem and Palmer imply rivers are a major, if not primary, natural terrestrial feature unifying the land's diverse phenomena. Rivers are living things, complex ecosystems. Drawing lines or boundaries around any ecosystem creates a reduction. If we want to

think and see ecologically, with a minimum of reduction and caricaturizing, rivers might be our best natural models.

We have expanded our conception of rivers to remind ourselves that while a river writer's primary embrace is often a ribbon slicing through wilderness, his attention to meadows, trees, and valleys, mountains and stars, is just as keen, and often just as moving.

The label 'river writer' does not exclude the poets of rivers' smaller cousins--streams, creeks, brooks, just as poetics includes all works of crafted words, not only poems.

Riparian Perceptions

Embodiments of riparian perceptions may be found in the texts of river writers. Stories, notes, poems, journals entries, all contain descriptions of rivers. An author's riverine descriptions hold, just as Cohen's does, intimations of his or her perceptions.

An example will help us understand these perceptions, and, as well, illustrate why I have called them riparian. The example comes from Henry Van Dyke's Little Rivers:

The personality of a river is not to be found in its water, not in its bed, nor in its shore. Either of these elements, by itself, would be nothing. Confine the fluid contents of the noblest stream in a walled channel of stone and it ceases to be a stream But take away the water from the most beautiful river-banks, and what is left? An ugly road with none to travel it; a long ghastly scar on the bosom of the earth.

The life of a river . . . consists in the union of the . . . water and the banks. They belong together. They act and react upon each other. The stream moulds and makes the shore; hollowing out a bay here, and building a long point there; alluring little bushes close to its side, and bending the tall slim trees over its current The shore guides and controls the stream; now detaining and now advancing it; now bending it in a hundred sinuous curves . .

. . . sometimes breaking it with sudden turns and unexpected falls into a foam of musical laughter, sometimes soothing it into a sleepy motion like the flow of a dream. (1895, pp. 12-13)

In Van Dyke's poetic description, his perception of a river's essence is the symbiosis between water and bank. Other intimations of symbiosis can be found in Palmer and Van Tighem. The thread connecting these passages constitutes a theme, the perception of symbiosis.

What makes Van Dyke's example particularly appropriate is that river and bank symbiosis captures well the sense of riparian. Riparian means "Of, pertaining to, or situated on, the banks of a river; riverine" (OED). The word encapsulates the essence of a river: flowing current-retaining banks. The Latin *ripa* means bank. By emphasizing the bank, the caricature of a river solely as flowing water is broken while the sense of river is retained. Further, the word riparian, by bringing attention to the irrevocable dialectic of river and bank, affords a heuristic simplification and symbolization of the complex, poly-constituting nature of rivers, without losing the important sense of dynamic symbiosis.

Summarizing the definition of river writers, two points need recalling. One is, river writers, as poets and witnesses, are individuals who have written about their experiences and insights related to rivers, banks, meadows, and other riparian wonders; secondly, intimations of riparian perceptions can be found in their texts.

Final Preparations

Before turning to the river writer texts, a few additional notes will be helpful.

Art and Truth

Once the idea of reading river writers took hold, I began studying literary texts having rivers as their focus. I mean literary in the traditional and proper sense of literature: "writings whose value lies in beauty of form or emotional effect" (COD).

I chose poetic river texts because the knowledge I pursue lives in the words of those who have tried to capture the poignant subtleties of riverine experiences. If the truths in these experiences are to live beyond their immediate unfoldings, the use of poetics is essential. Polkinghorne (1986) acknowledges the researcher's need to consider poetics:

. . . language has the power to provide an opening in which reality shows itself.

Interpretations of the natural and human realms need to assume an aesthetic approach in order to provide a fuller openness and to fit better whatever knowledge seeks to expose. (p. 27)

Noting that our desire is to know better what rivers know, a point made by John Fowles needs to be grasped: ". . . nature inherently forces the new appreciation on us. It obliges us to make poetic judgements" (1984, p. 86). In other words, to capture certain natural essences in accordance with nature's demand, one has no choice but to fabricate poetically. The paramount need for the artist to embellish is captured by Henry Miller:

The facts and events of life are for me only the starting points on the way towards the discovery of truth I am trying to seize the quintessential moments in which things happened, things which altered me profoundly. The man who tells the story is not the one who experienced the events recorded. There is distortion and deformation, but only for the purpose of capturing the true inner reality. (1964, p. 120)

Stories, fictions, poetry, embellished personal accounts, myths, and songs are all are potentially truth carrying forms. Northrope Frye puts it succinctly: "The poet's job is not to tell you what happened (actually), but what always happens (emotionally)" (n.d., n.p.).

Selection of Passages and Themes

In truth, the poetic works chose me as much as I chose them. As I read, many passages spoke, illuminating previously hidden or forgotten truths. Aldous Huxley (1942) describes a typical response to moving literature, a thought which crosses many a reader's mind: "This is what I have always felt and thought, but have never been able to put clearly into words, even for myself" (p. 354). Art, when it speaks to us, speaks for us. It says things we feel are true. In reading the river writers, I found insights, meanings, and truths valuable for others to hear about.

The dialectical process of selecting texts and passages is noteworthy. Although many passages spoke to me, it was I who had to limit the selection. Some passages are straight-forward descriptions; others contain metaphor. In some the perceptual meaning is clear, if not blatant. In others the perception is complex and difficult to proscribe. With such a variety of texts to choose from, how did I discriminate between them?

I read not as an art critic but as one trying to glean a sense of what has been seen, and heard, in and around rivers, for the purpose of documenting riparian perceptions. This demands I translate what the passages embody of perceptions. As an interpreter I have biases and

hence cannot mirror the perception the author intended. Nonetheless, in this first stage of the reading, attempting to be true to the authors' intentions, I use a mirror as the metaphor for the attitude I should take.

Precisely because I have biases, blind-spots, and personal agendas, vis-à-vis this research, my selection, interpretation, and labelling of passages, even in my intention to be mirror-like, yields interpretations at variance to what others might find. In the unique dialogue between me as a biased researcher and the unvarying text, themes began to emerge. So, despite my intention to be mirror-like in the first phase of my reading, I am aware that consciously and unconsciously I selected passages toward fulfilling a premeditated end. This is as it should be, for as an interpreter, according to Heideggerian and Gadamerian hermeneuticists, the greater responsibility I have is to forge meaning beyond what is given in the text. Ricoeur (1981) puts it this way: ". . . to interpret is to explicate the type of being-in-the-world unfolded in front of the text" (p. 141), or in other words, the text's value resides in its potential for illuminating the life which lays before us. Gadamer's understanding of the interpreter's job is stated clearly by Polkinghorne (1986):

. . . we bring our prior expectations and understanding schemes to texts and the resulting interpretation is a creative process in which our prejudgements are expanded through interaction with the text; interpretation is the production of the researcher, not a reproduction of the past. Thus we go to texts, not to know them objectively as intended by their authors, but to use them for enlarging and enhancing our own meaning structures. (p. 24)

With this task of the interpreter in mind, passages were selected and themes proscribed toward defining and nurturing ecological consciousness. Riparian perceptions can enlarge and enhance our sense of meaning, and our grasp on truth.

In the next chapter, Places of Current--aware of how interpretations tend to abstract further, and hence reduce the poets' perceptions--I have left most the speaking in the dialogue to the river poets. I keep in the background as best I can so their words can be heard. I intervene to proscribe and arrange the themes, and make connecting comments. Rather than extract niggardly passages, I have opted to use those which capture the richness, diversity, and interwovenness of the perceptions.

CHAPTER IV

PLACES OF CURRENT

There are so many willows, all of which can interbreed. Trying to hold each one to a name is like trying to give a name to each rill trickling over the bar here, and making it stick. Who is going to draw the lines? And yet it is done.

-Barry Lopez

Many rivers, where the grade is steep and current swift, become braided. A number of smaller streams break from the main channel and run their own course for awhile, sometimes cavorting along the way with sister streams. Further downriver they reunite with the main current. From above, the various channels intertwined around islands look like braids.

As I read the descriptions and thoughts of river writers and search for a way to frame the emerging themes, it is the image of a braided river that sticks in mind. There are many riparian themes, depending on where one draws the lines. Although certain themes may appear discrete, and others more prevalent, their existence in consciousness is confluent: like a braided river they run together. In their trip through consciousness their existence is a play of mutual support. The apparent autonomy of each theme, made visible in reflection, is couched in the coherence of a richer text.

I draw lines around five themes. There are many others. However, with Lopez, I try to resist the mind-set that needs to name "each rill trickling over the bar", for I think he's right: some of life's most

pleasurable things have no names. Besides, next year when I come again to measure the river, there might be seven channels, or six, or four. River watchers know a river's braids are always changing.

Thematic Set:

-Heightened Perception and Sensual Receptivity

-Experience of Riparian Beauty and Vitality

-Sense of Intimacy, and Love of Rivers

A most common perception of those who frequent rivers is that of having enriched sensual experiences and heightened perceptions. Canadian canoeist James Raffan (1986) says "River adventures give us new eyes, new ways of looking at the world . . ." (p. 5). River activist Tom Arnold, agrees:

There is a magical moment on every [river] trip. When you push off from shore for the first time, you know that nothing lies ahead but paddling, floating, watching the sun and the clouds, hearing the wind and the river, and that each day your senses will open like flowers to the sun and absorb more of what is around you. (in Palmer, 1986, p. vi)

Palmer sees in flowers opening to the sun a metaphor for his own heightened sensual receptivity to the natural world. Henry David Thoreau, in agreement with Palmer, sees a flower's sensitivity to the sun and man's sensitivity to a river as parallel natural occurrences:

I have passed down the river before sunrise on a summer morning between fields of lilies still shut in sleep; and when at length the flakes of sunlight from over the bank fell on the surface of the water, whole fields of white blossoms seemed to flash open before me, as I floated along, like the unfolding of a banner, so sensible is this flower

to the influence of the sun's rays. . . . How adapted these forms and colors to our eyes, a meadow and its islands We are made to love a river and the meadow, as the wind to ripple water. (in Stevens, 1939, pp. 176-77)

Gretel Ehrlich, while on a search for a river's source, frames her experience of wonder gustatorily:

I stop to eat lunch. Ralph Waldo Emerson wrote, "The Gautama said that the first men ate the earth and found it sweet." I eat baloney and cheese and think about eating the earth. It's another way of framing our wonder in which the width of the mouth stands for the generous palate of consciousness. I cleanse my palate with miner's lettuce and stream water and try to imagine what kinds of sweetness the earth provides: the taste of glacial flour, or the mineral taste of basalt, the fresh and foul bouquets of rivers, the desiccated, stinging flavor of a snow storm--like eating red ants, my friend says. (1988, p. 35)

Related to and inseparable from the heightened sensual experiences of those who know rivers is their perception of riparian beauty. This is common among river writers. Nathaniel Hawthorne records the beauty of the meadows through which the Concord River flows:

The scenery of Concord, as I beheld it from the summit of the hill, has no very marked characteristics, but has a great deal of quiet beauty, in keeping with the river. There are broad and peaceful meadows, which, I think, are among the most satisfying objects of natural scenery. The heart reposes on them with a feeling that few things else can give . . . (1883, p. 290)

And, in another passage from American Note-Books, Hawthorne again speaks of beauty, which in turn suggests other themes:

. . . entering the North Branch, [I] soon found myself floating quietly along a tranquil stream, sheltered from the breeze by the woods and a lofty hill. The current, likewise, lingered along so gently that it was merely a pleasure to propel the boat against it. I never could have conceived that there was so beautiful a river-scene in Concord as this of the North Branch. The stream flows through the midmost privacy and the heart of a wood . . .

with its presence calm, gentle and unobtrusive . . . (1883, p. 323)

Thoreau suggests that witnessing nature's grand display is a most serious business:

We pass haymakers in every meadow, who may think we are idlers. But Nature takes care that every nook and cranny is explored by some one. While they look after the open meadows, we farm the tract between the river's brinks and behold the shores from that side. We, too, are harvesting an annual crop with our eyes, and think you Nature not glad to display her beauty to us? (1961, p. 181)

More contemporary writers share a similar perception of riparian beauty. Canadian Roderick Haig-Brown says, "A river is water in its loveliest form . . ." (1946, p. 343), and in A River Never Sleeps, he summarizes his love of fly-fishing and rivers:

I still don't know why I fish or why other men fish, except that we like it and it makes us think and feel. But I do know that if it were not for the strong, quick life of rivers, for their sparkle in the sunshine, for the cold grayness of them under rain and the feel of them about my legs as I set my feet hard down on rocks or sand or gravel, I should fish less often. A river is never quite silent; it can never, of its very nature, be quite still; it is never quite the same from one day to the next. It has a life of its own and its own beauty, and the creatures it nourishes are alive and beautiful also. Perhaps fishing is for me, only an excuse to be near rivers. If so, I am glad I thought of it. (p. 352)

As this longer passage intimates, sensuality, beauty, vitality, and a suggestion of mystery are all properly descriptive of rivers.

Another fisherman and lover of rivers, particularly their headwaters, is Ted Williams. In his essay "Rivertops" (1986), Williams tries to capture what it is about rivertops that are so appealing to him:

. . . troutlust is only one reason to find and keep rivertops. Rivertops are magnetized wires drawing and concentrating all the best things forests have. One may be equally infatuated with wildflowers or woodland butterflies or berries or woodpeckers or herons or deer or mink or beaver or drumming grouse or visions of silver spilling over moss Come to think of it, to me each of these good things are all of them and more, and if I didn't hang around rivertops because of trout, it would be because of something else. (p. 201)

Williams concludes his essay by drawing support from another authority on beauty and trout:

"[Wild] trout, unlike men," writes Voelker, "will not--indeed cannot--live except where beauty dwells, so that any man who would catch a trout finds himself inevitably surrounded by beauty: he can't help himself." (p. 203)

As some of the above passages hint, the vitality and beauty associated with rivers evoke in their appreciators a feeling of intimacy and love for rivers. Affection for riparian places is a theme that weaves, like beauty, through many of the works of river writers.

Ehrlich, after eating cheese and baloney, continues her meditation:

As I begin to walk again it occurs to me that this notion of "eating the earth" is not about gluttony or hedonism, or sin, but, rather, unconditional love. Everywhere I look I see the possibility of love. (1988, p. 35)

For Haig-Brown river love is not a possibility but a fact. He confesses: "I have never yet seen a river that I could not love" (1946, p. 79). His intimacy with rivers rings through most of his writing. In one passage he details how one's love for a river grows:

One may love a river as soon as one sets eyes upon it; it may have certain features that fit instantly into one's conception of beauty, or it may recall the qualities of some other river, well known and deeply loved. One may feel in the same way an instant affinity for a man or a woman and

know that here is pleasure and warmth and the foundation of deep friendship. In either case the full riches of the discovery are not immediately released--they cannot be; only knowledge and close experience can release them. Rivers, I suppose are not at all like human beings, but it is still possible to make apt comparisons; and this is one: understanding, whether instinctive and immediate or developing naturally through time or grown by conscious effort, is a necessary preliminary to love. Understanding of another human being can never be complete, but as it grows toward completeness, it becomes love almost inevitably. One cannot know intimately all the ways and movements of a river without growing to love it. And there is no exhaustion to the growth of love through knowledge, whether the love be for a person or a river, because the knowledge can never become complete. One can come to feel in time that the whole is within one's compass, not yet wholly and immediately known, but there for the knowing, within the last little move of reaching; but there will always be something ahead, something more to know. (p. 344-45)

In this passage we have a confluence of three riparian perceptions. In recounting the development of his love for rivers, the first riparian theme, Haig-Brown sees in it a parallel to the love that develops between humans over time: "In either case, the full riches of the discovery are not immediately released." The perception of a link between rivers and human life is a universal theme in river writing. Another recurrent riparian theme is the perception of the still unknown, the mysterious, which draws us on, "there will always be something ahead, something more to know," and riches to be discovered.

Just as the above passage suggested additional riparian themes, earlier quotations have also hinted at others. Ehrlich intimated the perception of wonder; Hawthorne evoked a sense of the gentle; Williams hinted at the inherent goodness and unity in rivertop beings; Haig-Brown notes that rivers make us "think and feel". While all these themes are

worthy of pursuit it is this last theme I will follow, the role rivers play in cognition and imagination.

Theme: -The Role of Rivers in Feeding Imagination

While the whole of nature can fire imagination, there seems to be something particular in close proximity to rivers that encourages thought and imagination. William Wordsworth sees in the river he frequently visits the opportunity to revive a flagging imagination:

O sylvan Wye! thou wanderer through the woods,
How often has my spirit turned to thee!
And now, with gleams of half-extinguished thoughts,
With many recognitions dim and faint,
And somewhat of a sad perplexity,
The picture of the mind revives again . . . (1971, p. 48)

Thoreau sees his river in much the same light:

What a relief and expansion of my thoughts when I come out from that inland position . . . to this broad river's shore! . . . Here the earth is fluid to my thought, the sky is reflected from beneath, and around yonder cape is the highway to other continents. This current allies me to all the world. There my thoughts were confined and trivial, and I hid myself from the gaze of travellers. Here they are expanded and elevated, and I am charmed by the beautiful river-reach. (1961, p. 180-81)

The power of rivers in opening imagination is supported by Haig-Brown's contemplations and experiences along small streams:

. . . I automatically rule out all lakes and the salt water; only a river can give me what I want. . . I can lie for an hour at a time and watch the flow of a little stream, dropping pieces of dry sticks into it to trace the current movements . . .
A fold or break of current, a burst of bubbles or the ripple of a stone in a little stream, sharply and vividly matched to some known part of a big river, releases in me a flood of satisfaction that must, I think, be akin to that

which a philosopher feels as his mind is opened to a profound truth. I feel larger and better and stronger for it in way that have nothing to do with any practical knowledge. (1946, p. 80-81)

While Wordsworth gives no suggestion in his poem what it is about rivers that encourage imagination, Thoreau and Haig-Brown do. Haig-Brown is not sure what the connection is, but thinks perhaps his experience of profound truth grows ". . . from a sense of unity between the great and the small . . ." (p. 80). Support for this notion is found in John Muir:

Most people like to look at mountain rivers After tracing the Sierra streams from their fountains to the plains, marking where they bloom white in falls, glide in crystal plumes, surge gray and foam-filled in boulder choked gorges, and slip through woods in long, tranquil reaches--after thus learning their language and forms in detail, we may at length hear them chanting all together in one grand anthem, and comprehend them all in a clear inner vision, covering the range like lace. (1971, p. 47)

Muir suggests unifying clear inner visions, our ideas and images, grow out of an understanding of the smaller, concrete and particular details.

For Thoreau it seems the actual reflections on the river's surface set his mind to dreaming:

It required some rudeness to disturb with our boat the mirror-like surface of the water, in which every twig and blade of grass was so faithfully reflected; too faithfully indeed for art to imitate, for only Nature may exaggerate herself. The shallowest still water is unfathomable. Wherever the trees and skies are reflected, there is more than Atlantic depth, and no danger of fancy running aground. We notice that it required a separate intention of the eye, a more free and abstracted vision, to see the reflected trees and sky, than to see the river bottom merely. (1971, p. 13)

Is it possible that the "free and abstracted vision" of imagination is led, or mediated, by the physical act of trying to discern and hold in

mind, through a "separate intention of the eye", both reflected trees and river bottom?

A more prosaic example of imaginative thinking is provided by Norman Maclean. He's fishing with his brother on Montana's Big Blackfoot River. His brother is catching fish but he is not. Somehow his brother has figured out what the fish are feeding on and put on the appropriate fly:

He said, "They are feeding on drowned yellow stone flies."
I asked him, "How did you think that out?"
. . . "All there is to thinking," he said, "is seeing something noticeable which makes you see something you weren't noticing which makes you see something that isn't even visible." (1976, pp. 92-93)

What his brother saw or didn't see is not important here, but like Muir and Haig-Brown above, he recognized the tacit gestalt, or invisible connecting pattern, through reconciling concrete particulars. It is noteworthy that the particulars are intimately linked with rivers.

Hugh MacLennan sees in rivers the possibility of going beyond human trappings:

I found myself longing for something older and more permanent than human beings, something not air-conditioned, not plastic, not high risen, not bulldozed, not sky-hooked, not greased over by the platitudes of television, not made preposterous by the claims of politicians, advertisers, and propagandists. I wanted to return to rivers, and please don't laugh at this: I wanted to think like a river even though a river doesn't think. Because every river on earth, some of them against incredible obstacles, ultimately finds its way through the labyrinth to the universal sea. (1961, pp. 7-8)

It is obvious from this passage that MacLennan's wish to "think like a river" is a way of seeking in rivers a taste of something more enduring than his transitory being, something less defiled than environments in

which he lives, something, perhaps, deep in himself he wants to know again.

Core Theme: -Finding in Rivers a Sense of the Sacred

A core theme running through river writing, hinted at by MacLennan, is the perception that rivers afford us an opportunity to experience the sacred. Sacred, here, is meant in the sense that Gary Snyder (1984) uses it in his Good Wild Sacred. He says: "The point is in making intimate contact with wild world, wild self. Sacred refers to that which helps take us out of our little selves into the larger self of the whole universe" (p. 26). As Snyder suggests, the wild world is where the sacred dwells, and wilderness then, its deepest harbour. Passages illustrating the experience of contacting the wild and the sacred are varied. However, they all cluster around this sense of contacting, if not merging, with a unity greater than ourselves.

Like many who are fascinated by, and return again and again to rivers, Gretel Ehrlich (1988) reflects on what the draw of wilderness is:

. . . I've come here to seek out the source of a river, and as we make the daylong ascent from a verdant valley, I think about walking and wilderness. We use the word "wilderness," but perhaps we mean wildness. Isn't that why I have come here? In wilderness, I seek the wildness in myself--and in so doing, come on the wildness everywhere around me because, being part of nature, I'm cut from the same cloth. (p. 35)

In Ehrlich's hike to the source of a river she finds wildness, and "the possibility of love" all around her. She goes on:

To find wildness, I must first offer myself up, accept all that comes before me: a bullfrog breathing hard on a rock; moose tracks under elk scats; a cloud that looks like a clothes pin; a seep of water from a high cirque, black on brown, draining down from the brain of the world. (p. 35)

As a prerequisite to feeling wildness, or seeing the possibilities for love, we have to offer ourselves up, to surrender to all before us.

This is a nice play on words. Firstly, we must surrender to all those natural things present on Earth before humans arrived. Secondly, we must surrender and open up to all that is present. Here, in the sheer facticity of the natural world before us, we may glimpse the sacred.

Edward Abbey is perhaps the most vocal river writer to argue that this one beautiful world is all there is. On a float down the Colorado through Glen Canyon before it was dammed and altered, Abbey writes:

But the love of wilderness is more than a hunger for what is always beyond reach; it is also an expression of loyalty to the earth, the earth which bore us and sustains us, the only home we shall ever know, the only paradise we ever need--if only we had eyes to see. Original sin, the true original sin, is the blind destruction for the sake of greed of this natural paradise which lies all around us--if only we were worthy of it.

. . . the Paradise of which I write and wish to praise is with us yet, the here and now, the actual, tangible, dogmatically real earth on which we stand. (1968, p. 190)

Further down the river, Abbey again makes a plea for us to see what is before our eyes:

The only sound is the whisper of the running water, the touch of my bare feet on the sand, and once or twice, out of the stillness, the clear song of a canyon wren.

Is this the last locus Dei? There are enough cathedrals and temples and altars here for a Hindu pantheon of divinities. . . .

If a man's imagination were not so weak, so easily tired, if his capacity for wonder not so limited, he would abandon forever such fantasies of the supernatural. He would learn to perceive in water, in leaves and silence more

than sufficient of the marvelous, more than enough to console him for the loss of ancient dreams. (p. 200)

At the tail-end of another float down the Colorado, Abbey praises again the immanent sacredness in riparian wonders:

One wishes to go on. On this great river one could glide forever--and here we discover the definition of bliss, salvation, Heaven, all the old Mediterranean dreams: a journey from wonder to wonder, drifting through eternity into ever-deeper, always changing grandeur, through beauty continually surpassing itself: the ultimate Homeric voyage." (1986, n.p.)

Abbey relates clearly in these passages his perception that here on Earth the sacred dwells. And, if we have eyes to see or imagination, or if, like Ehrlich, we surrender, we can come to know the sacred when we are immersed in wildness.

Barry Lopez's poetic meditation River Notes is a celebration of the sacred. Characteristically, his loss of self plays a central role. He writes ". . . each day more of me slips away. Absorbed in seeing how the water comes through the bend, just so, I am myself, sliding off" (1979, p. 24). He goes on:

I have lost, as I have said, some sense of myself. I no longer require as much. And though I am hopeful of recovery, an adjustment as smooth as the way the river lies against the earth at this point, this is no longer the issue with me. I am more interested in this: from above, to a hawk, the bend must appear only natural and I for the moment inseparably a part, like a salmon or a flower. I cannot say how this single perception has dismantled my loneliness. (p. 26)

In his idea of a hawk's perception of him, Lopez finds solace. No longer feeling loneliness he senses a profound belongingness within the natural order. He is one with the flower, the salmon, the hawk. The recovery he mentions is from the scientific, abstracting view of the

world, a view with which he had heretofore approached the bend in the river by attempting to measure it with science, and failed. He now takes "the measure of the bend" through riparian experiences: "I listened for the sound of water on the outer bar. I observed the hunt of the caddis fly" (p. 26).

With this gradual change in perception, from a scientific to a more poetic vision, Lopez came to know nature's sacred order. He found the eyes to see, and tells where this journey of awakening began:

When you awake, if you follow the river into the trees I will be somewhere ahead or beyond, like a flight of crows. When you are suddenly overwhelmed with a compassion that staggers you and you begin to run along the bank, at a moment when your fingers brush the soft skin of a deer-head orchid and you see sun-drenched bears stretching in an open field like young men, you will know a loss of guile and that the journey has begun. (p. xiii)

Lopez's "staggering compassion" echoes Ehrlich's possibilities for "unconditional love", and comes to him, paralleling Ehrlich's "offering herself up", with his own "loss of guile."

Norman Maclean's perceptions of coming to know the sacred reiterates the understanding of needing to let go, however his recounting is more experiential:

I sat there in the hot afternoon trying to forget the beaver and trying to think of the beer. Trying to forget the beaver, I also tried to forget my brother-in-law and Old Rawhide. . . .
I sat there and forgot and forgot, until what remained was the river that went by and I who watched. On the river the heat mirages danced with each other and then they danced through each other and then they joined hands and danced around each other. Eventually the watcher joined the river, and there was only one of us. I believe it was the river.
(1976, p. 61)

In another passage Maclean captures, in simple poetics, a similar experience:

We sat on the bank and the river went by. . . .
 On the Big Blackfoot River above the mouth of Belmont Creek the banks are fringed with Ponderosa pines. In the slanting sun of late afternoon the shadows of great branches reached from across the river, and the trees took the river in their arms. The shadows continued up the bank until they included us. (pp. 101-2)

In all these passages are either explicit or implicit expressions of perceiving in rivers something sacred. Gretel Ehrlich seeks out wildness, and through surrender perceives herself as being cut from the same cloth. For Edward Abbey the sacred manifests itself in every earthy aspect of his riverine world. Barry Lopez finds in his river world an antidote for loneliness; as with Chief Seattle, the river, hawk, flower and salmon are brothers. Maclean's experience of the sacred comes in his poignant merging with the Big Blackfoot River.

Although this core theme, of losing oneself near rivers in coming to know the sacred, runs through most of the river writing, knowing another theme, that of flow, provides a fuller picture of the powerful, psycho-spiritual nourishment river experience can afford.

Core Theme: -The Experience of Flow

The single feature making rivers radically different from other natural phenomena, and perhaps the feature making them most appealing to humans, is their quality of flow. In river writers flow is a dominant and recurring theme, and seems to capture in a variety of forms, the essence of what pulls us back to rivers. The best way to capture this

essence, aside from experiencing the flow first hand--which, incidentally, is the only real way to know it--is to taste a sampling of how others have perceived it.

Loren Eiseley's float on the Platte River shows nicely how the experience of flow is wedded to the previous theme, the experience of the sacred.

. . . standing quietly in the water, feeling the sand shifting away under my toes. . . . I lay back in the floating position that left my face to the sky, and shoved off. The sky wheeled over me. For an instant, as I bobbed in the main channel, I had the sensation of sliding down the vast tilted face of the continent. It was then that I felt the cold needles of the alpine springs at my fingertips, and the warmth of the Gulf pulling me southward. Moving with me, leaving its taste upon my mouth and spouting under me in dancing springs of sand, was the immense body of the continent itself, flowing like the river was flowing, grain by grain, mountain by mountain, down to the sea. . . . I was water (1956, pp. 18-19)

Eiseley's expression is unique among the river writers I have read. In the previous examples which suggest a bond between oneself and a unified natural order, and in the examples that follow, no one explicitly states that he or she experienced a merging with the elemental. Eiseley does, and it is worth quoting at length some of his reflections on the experience:

Once in a lifetime, perhaps, one escapes the confines of the flesh. Once in a lifetime, if one is lucky, one so merges with sunlight and air and running water that whole eons, the eons that mountains and deserts know, might pass in a single afternoon without discomfort. The mind has sunk away into its beginnings among old roots and the obscure tricklings and movings that stir inanimate things. . . . one can never quite define this secret; but it has something to do, I am sure, with common water. (p. 16)

In many a fin and reptile foot I have seen myself passing by--some part that lies unrealized in the momentary shape I

inhabit. People have occasionally written me harsh letters and castigated me for a lack of faith in man when I have ventured to speak of this matter in print. They distrust, it would seem, all thoughts and shapes but their own. They would bring God into the compass of a shopkeeper's understanding and confine Him to those limits, lest He proceed to some unimaginable and shocking act--create perhaps, as a casual afterthought, a being more beautiful than man. As for me, I believe nature capable of this, and having been part of the flow of the river, I feel no envy--any more than the frog envies the reptile or an ancestral ape should envy man. (pp. 24-25)

Eiseley's intellectual identification with what he calls "the water brotherhood" is based on his experience of merging with the Platte River. Although others have not explicitly stated "I experienced the flow," their writings intimate they have a good sense of similar stirrings below the surface. In any case, rivers obviously evoke the perception of flow.

Edward Abbey seems to know well what Eiseley is talking about, for he too has a sense of his own "old roots and obscure tricklings":

We are indeed enjoying a very intimate relation with the river: only a layer of fabric between our bodies and the water. I let my arm dangle over the side and trail my hand in the flow. Something dreamlike and remembered, that sensation called *deja vu*--when was I here before? A moment of groping back through the maze, following the thread of a unique emotion, and then I discover the beginning. I am fulfilling a dream of childhood and one as powerful as the erotic dreams of adolescence--floating down the river. Mark Twain, Major Powell, every man that has ever put forth on flowing water knows what I mean. (1968, p. 176)

Down the river we drift in a kind of waking dream . . . (p. 187)
 . . . keeping to the shady side, we drift down the splendid river, deeper and deeper and deeper into the fantastic. (p. 205)

In these passages Abbey evokes a sense of flow and the liberation it brings. The river trip, he says, ". . . is a rebirth into primeval liberty, into freedom in the most simple, literal, primitive meaning of

the word, the only meaning that really counts" (p. 177). His trip down the river is a trip deeper and deeper into the sacred.

Two similar expressions of flow come from Thoreau and Muir.

Thoreau's vision of flow comes toward the end of his week-long boat trip on the Concord and Merrimack Rivers:

. . . all things seemed with us to flow; the shore itself, and the distant cliffs were dissolved by the undiluted air . . . Trees were but river of sap and woody fibre. . . . And in the heavens there were rivers of stars, and milky-ways already beginning to gleam and ripple over our heads. There were rivers of rock on the surface of the earth, and rivers of ore in its bowels, and our thoughts flowed and circulated, and this portion of time was but the current hour. (1983, p. 331)

Stimulated by seven days in the rivers' currents, Thoreau's imagination takes wing. The whole universe seems to flow, and their time in it like a second in eternity.

Muir's vision is recorded as a journal entry in his book My First Summer in the Sierra.

. . . Contemplating the lace-like fabric of streams outspread over the mountains, we are reminded that everything is flowing--going somewhere, animals and so-called lifeless rocks as well as water. Thus the snow flows fast or slow in grand beauty-making glaciers and avalanches; the air in majestic floods carrying minerals, plant leaves, seeds, spores, with streams of music and fragrance; water streams carrying rocks both in solution and in the form of mud particles, sand, pebbles, and boulders. Rocks flow from volcanoes like water from springs, and animals flock together to flow in currents modified by stepping, leaping, gliding, flying, swimming, etc. While the stars go streaming through space pulsed on and on forever. . . (1968, p. 142)

It is very likely Muir had read Thoreau's account before penning his own; nonetheless, Muir's experience of flow, as documented by Cohen (1984), was profound, and is powerfully implicated in his spiritual

awakening. While for Thoreau, "all things seemed . . . to flow," for Muir all things did flow. In a piece of writing more crafted than his journal entry above, from The Mountains of California, Muir captures the rhythm of flow he feels all around him:

Down through the midst, the young Tuolumne was seen pouring from its crystal fountains, now resting in glassy pools as if changing back again into ice, now leaping in white casacades as if turning to snow; gliding right and left between granite bosses, then sweeping on through the smooth, meadowy levels of the valley, swaying pensively from side to side with calm stately gestures past dipping willows and sedges, and around groves of arrowy pine; and throughout its whole eventful course, whether flowing fast or slow, singing loud or low, ever filling the landscape with spiritual animation, and manifesting the grandeur of its sources in every movement and tone. (1913, p. 50)

In considering two core themes, sacredness and flow, we can make this tentative remark: while many of our examples intimating sacredness were without flow, none of our examples of flow were without intimations of the sacred.

Composite Theme: -Parallels Between Rivers and Human Life

Perhaps the most recurrent theme in river writing is the parallel between a river and human life. Often this theme reflects the complementarity between our last two themes, the experience of the sacred and the experience of flow. Humans are one with all life and are helped to apprehend life's current and their place within it in naturally flowing water.

In quotations already used to illustrate other riparian themes we have glimpsed analogies between rivers and human life. Haig-Brown

framed the growth of his love for rivers in human terms; Chief Seattle saw rivers as brothers. In almost every river writer similar analogies can be found.

A prevalent sub-theme of this overarching composite theme is the parallel that exists between human narratives and rivers. For Norman Maclean, the dancing heat mirages remind him of things in his own life:

As the heat mirages on the river in front of me danced with and through each other, I could feel patterns from my own life joining with them. It was here, while waiting for my brother, that I started this story, although, of course, at the time I did not know that stories of life are more like rivers than books. (1976, p. 63)

Gretel Ehrlich says:

To trace the history of a river, or a raindrop as John Muir would have done, is also to trace the history of the soul, the history of the mind descending and arising in the body. In both we constantly seek and stumble on divinity, which, like the cornice feeding the lake and the spring becoming a waterfall, feeds, spills, falls, and feeds itself over and over again. (1988, pp. 35-36)

This passage unites major themes. Not only is the history of the soul likened to the history of a river, but, in tracing history we stumble on the sacred. Further, Ehrlich touches on a theme soon to be considered, the perception that rivers manifest life's continuous renewal and rebirthing.

John Muir provides a penetrating understanding of the relationships between human and river history, and the dwelling of the sacred in the terrestrial:

The more extensively terrestrial a being becomes, the higher it ranks among its fellows, and the most terrestrial being is the one that contains all the others, that has, indeed, flowed through all the others and borne away parts of them, building them into itself. Such a being is man, who has flowed down through other forms of being and absorbed and

assimilated portions of them into himself, thus becoming a microcosm most richly Divine because most richly terrestrial, just as a river becomes rich by flowing on and on through varied climes and rocks, through many mountains and vales, constantly appropriating portions to itself, rising higher in the scale of rivers as it grows rich in the absorption of the soils and smaller streams. (in Cohen, 1984, p. 138)

It is important not to mistake Muir's sense of higher with better, for clearly he perceived himself as one and equal to other creatures, and rocks, lichen, and trees, as this and numerous other passages attest:

All these varied forms, high and low, are simply portions of God, radiated from Him as a sun, and made terrestrial by the clothes they wear, and by the modifications of a corresponding kind in the God essence itself. (p. 138)

Muir's intimations of a river's divine yet earthy heritage are similar to a vision Hawthorne had:

. . . if we remember [the river's] tawny blue and muddiness of its bed, let it be a symbol that the earthliest human soul has an infinite spiritual capacity and may contain the better world within its depths. (1971, p. 47)

Other examples showing the parallels between rivers and human life illustrate the variety of perspectives river writers hold. Henry Van Dyke's book Little Rivers, a celebration of idleness, is full of such analogies. One will suffice here:

The life of a river, like that of a human being, consists in the union of soul and body, the water and the banks. They belong together. They act and react upon each other. The stream moulds and makes the shore . . . sending a still lagoon full of white arrowheads and rosy knot-weed far back into the meadow. The shore guides and controls the stream . . . sometimes soothing it into a sleepy motion like the flow of a dream.

And is it otherwise with the men and women whom we know and like? Does not the spirit influence the form, and form affect the spirit? Can we divide and separate them in our affections? (1895, pp. 12-13)

And Gretel Ehrlich, in her The Solace of Open Spaces (1985), suggest a whole plethora of human likenesses to rivers:

Everything in nature invites us constantly to be what we are. We are often like rivers: careless and forceful, timid and dangerous, lucid and muddied, eddying and gleaming, still. Lovers, farmers, and artists have one thing in common, at least--fear of "dry spells," dormant periods in which we do no blooming, internal droughts only the waters of imagination and psychic release can civilize. (p. 84)

Here also is a suggestion of a previous theme, the role of rivers in feeding imagination.

There seems to be something in the perception of flow, and in particular of flow's unity in a rhythm of circularity, that captures the essence of all riparian themes. A look at some examples suggests the flow's essential circularity in its renewal and re-birthing. The theme is one that has been with humanity for millennia, in both eastern and western spiritual traditions.

Heraclitus, a pre-Socratic Greek metaphysician said "Everything flows", and illustrated the ever-changing progression of human life in his statement "No one can step in the same river twice." Life, the river, is one continuous thread, flowing on forever. Thoreau, on his float on the Concord, echoed a similar notion: "A man's life should be constantly as fresh as this river. It should be the same channel, but a new water ever instant . . . (1983, p. 132). Annie Dillard, reflecting on the same theme says:

The creeks--Tinker and Carvin's--are an active mystery, fresh every minute. Theirs is the mystery of the continuous creation and all that providence implies: the uncertainty of vision, the horror of the fixed, the dissolution of the present, the intricacy of beauty, the pressure of fecundity, the elusiveness of the free, and the flawed nature of

perfection. . . . The creeks are the world with all its stimulus and beauty; I live there. (1974, pp. 2-3)

Through her own mystic vision, Dillard sees in these creeks and their fresh vitality her own place in the world: "I live there".

The continuous flow of life, arising fresh each minute, is central to the Eastern spiritual tradition of Taoism. In the ancient Chinese oracle, the I Ching, or Book of Changes, water is one of the central metaphors for human life. The hexagram K'an's image is water:

. . . the water that comes from above and is in motion on earth in streams and rivers, giving rise to all life on earth.

In man's world K'an represents the heart, the soul locked up within the body, the principle of light inclosed in dark--that is, reason. . . . Water sets the example for the right conduct. . . . It flows on and on, and merely fills up all the places through which it flows; it does not shrink from any dangerous spot nor from any plunge, and nothing can make it lose its own essential nature. (I Ching, 1967, p. 115)

As in Heraclitus's river, we sense here the eternal mystery inherent in life. Though all things change and flow on forever, water does not lose its essential nature. On Earth it gives rise to all life. Water and spirit dwell immanently in all earthy manifestations.

Contemporary mystics share in the same understanding. Lopez provides an excellent, concrete example of the circularity of flow by appealing to a natural phenomenon he knows well:

On other evenings he would write in a more orderly hand and at tremendous length, sometimes until dawn: on salmon, on the dependability of their migration from the sea, on the irrefutable evidence of it. In the years until now, during the worst times, he held this idea like a walnut in his fist, cherishing its permanence, its meaning . . .

He thought less of the accidents in his life, nothing (he reflected) more than the turning of the earth, and focused instead on the sacred order to which the salmon

coming upstream to spawn and die was central. (Lopez, 1979, pp. 51-2)

Haig-Brown suggests his own perception of seasonal flow in his book A River Never Sleeps, where each chapter is a month, unfolding sequentially through a whole year. And likening rivers to a body's circulatory system, he remarks: ". . . rivers are veins of the earth through which the life blood returns to the heart" (1946, p. 343). In an analogous metaphor, Eiseley acknowledges life's grander cycles:

I, too, was a microcosm of pouring rivulets and floating driftwood gnawed by the mysterious animalcules of my own creation. I was three fourths water, rising and subsiding according to the hollow knocking in my veins: a minute pulse like the eternal pulse that lifts Himalayas and which, in the following systole, will carry them away. (1959, p.20)

In his piece "The Round River", Aldo Leopold uses Wisconsin's mythical Round River as a model for life's circular processes:

One of the marvels of early Wisconsin was the Round River, a river that flowed into itself, and thus sped around and around in a never-ending circuit Wisconsin not only had a round river, Wisconsin is one. The current is the stream of energy which flows out of the soil into plants, thence into animals, thence back into the soil in a never ending circuit of life. 'Dust unto dust' is a desiccated version of the Round River concept. (1966, p. 188)

Ehrlich sees in wildness this same rebirthing, and evokes it with the ancient image of uroboros:

Wildness has no conditions, no sure routes, no peaks or goals, no source that is not instantly becoming something more than itself, then letting go of that, always becoming. It cannot be stripped of its complexity by CAT scan or telescope. Rather, it is a many pointed-truth, almost a bluntness, a sudden essence like the wild strawberries strung along the ground on scarlet runners under my feet. Wildness is the source and fruition at once, as if every river circled round, the mouth eating the tail--and the tail, the source. (1988, p. 36)

Suggested in many of these 'river of life' examples are intimations of the mysterious. With Ehrlich we are compelled to grant that whatever it is about rivers, wildness, mystery, and all the other wonderful earthy phenomena, complexity plays an integral role. Rather than reducing the overall complexity of riparian perceptions in a summary, and in keeping with the spirit of the mysterious, two examples intimate yet another theme emerging. Perhaps this emergence is only one of a never-ending current of riparian themes.

Loren Eiseley makes this thoughtful point at the end of his essay "The Flow of the River":

Men talk much of matter and energy, of the struggle for existence that molds the shape of life. These things exist, it is true; but more delicate, elusive, quicker than fins in water, is that mysterious principle known as "organization," which leaves all other mysteries concerned with life stale and insignificant by comparison. For that without organization life does not persist is obvious. Yet this organization itself is not strictly the product of life, nor of selection. Like some dark and passing shadow within matter, it cups out the eyes' small windows or spaces the notes of a meadowlark's song in the interior of a mottled egg. That principle--I am beginning to suspect--was there before the living in the deeps of water. (1957, p. 26)

From Norman Maclean (1976), two passages, the last of which concludes his novella A River Runs Through It:

. . . "In the part I was reading it says the Word was in the beginning, and that's right. I used to think water was first, but if you listen carefully you will hear that the words are underneath the water."

"That's because you are a preacher first and then a fisherman," I told him. "If you ask Paul, he will tell you that the words are formed out of water."

"No," my father said, "you are not listening carefully. The water runs over the words. Paul will tell you the same thing. . . ." (pp. 95-6)

. . . Then in the Arctic half-light of the canyon, all existence fades to a being with my soul and memories and the

sounds of Big Blackfoot River and the four-count rhythm and the hope a fish will rise.

Eventually, all things merge into one, and a river runs through it. The river was cut by the world's great flood and runs over rocks from the basement of time. On some of the rocks are timeless raindrops. Under the rocks are the words, and some of the words are theirs.

I am haunted by waters. (p. 104)

CHAPTER V

APPRECIATION

The most beautiful experience we can have is the mysterious. It is the fundamental emotion which stands at the cradle of true art and true science . . .

-Albert Einstein

With a description of riparian perceptions in hand, I want to look at them now for ecological soundness. As we reflect upon the streams in the braid, recall that each stream is fed by a single current. The apparent autonomy of any perceptual stream is in fact an abstraction, a handy mental artifact, meant to bring attention to details. Below, a number of important riparian perceptions are organized around three 'separate' streams. The final theme is the main current, the one that gives life and meaning to all riparian perceptions.

Cut From the Same Cloth

A dominant perception of the river writers is their sense, as Ehrlich says, of being "cut from the same cloth." Lopez ends his celebration of rivers with this insight: "To stick your hands into the river is to feel the cords that bind the earth together in one piece" (1979, p. 81). Thoreau writes "This current allies me to all the world." Eiseley experienced the allying while immersed in the Platte River. I like best Norman Maclean's expression of river-merging, with the dancing heat mirages: "Eventually the watcher joined the river, and

there was only one of us. I believe it was the river." For these poets, as for Chief Seattle, rivers are kin.

This awareness of being woven deeply into the fabric of life is sound ecologically because it is a correct perception of one of humanity's essential attributes. Ecologist Paul Ehrlich (1986) frames this core understanding of our interwovenness in terms of ecosystems ". . . the central organizing idea in ecology" (Worester, 1977, p. 378):

All human beings and human activities are imbedded in and dependent upon the ecosystems of our planet. Ecosystems are the machinery of nature, the machinery that supports our lives. Without the services provided by natural ecosystems, civilization would collapse and human life would not be possible. (p. 239)

Ecologists Birch and Cobb (1981) base their ecological model on internal relations. The model

. . . asserts that living organisms take account of their environments, that is, that their relations to their environments are constitutive of what they are. . . . Human relations to this world are constitutive of human experience. A human experience is the way one takes account of one's world and responds to it. (p. 105)

Rather than isolated beings, we are 'relating' beings. In all 'dimensions' we exchange with our environments and transform material, information, energy, and ideas.

Participants in the emergent movement "deep ecology", a term coined by Arne Naess (1973), feel deep kinship with all life. Cultivating ecological consciousness ". . . involves becoming more aware of the actuality of rocks, wolves, trees, and rivers--the cultivation of the insight that everything is connected" (Devall & Sessions, 1985, p. 8). Devall and Sessions cite the case of John Seed. In an interview, Seed told of his feelings of connectedness:

"'I am protecting the rain forest,'" he said, "develops into 'I am part of the rainforest protecting myself.' I am that part of the rainforest recently emerged into thinking." What a relief, he said. "Thousands of years of imagined separation are over and we being to recall our true nature. That is, the change is a spiritual one, thinking like a mountain . . . (p. 199)

John Seed perceives his own thinking as the rainforest's emergent consciousness: "I am part of the rainforest protecting myself". He does not merely think he is part of the rainforest--he knows himself to be the rainforest: "I am the rainforest recently emerged into thinking." Such profound identification with wild things is the hallmark of the human perception of connectedness. It warrants a central place in any vision of sound ecological praxis.

The Sense of the Sacred

Just as Seed's kinship with rainforests hints at the sacred, similar intimations of the sacred can be found in the kinship river writers feel for rivers. Initially, I defined sacred as: ". . . that which helps us out of our little selves into the larger self of the whole universe" (Snyder, 1984, p. 26). This is a sketch of what an expanding self experiences, however, it says nothing about how the sacred is perceived by those who benefit from such expansion.

Recall, an act of perception is created when a perceiver appropriates and makes meaning of his life world. In perceptions we label 'sacred', the perceiver apprehends meaning in a divinity which dwells in wild places or things. Joseph Campbell (1988) gives an account of one of his meetings with the sacred:

There are sacred groves everywhere. Going into the forest as a little boy, I can remember worshiping a tree, a great

big old tree, thinking, "My, my, what you've known and been"
 It's a different kind of world to grow up in when
 you're in the forest with the little chipmunks and the great
 owls. All these things are around you as presences,
 representing forces and powers and magical possibilities of
 life that are not yours and yet are a part of all life, and
 that opens it out to you. Then you find it echoing in
 yourself, because you are nature. (p. 92)

Campbell describes moments which "open out to you", when you see the
 "great owls" and "little chipmunks" as magical forces. The owl and
 chipmunk are being intentionalities, valuable in themselves, and in no
 way ours. We see these luminous creatures woven with us into the fabric
 of life, and in our intimacies with them we come to realize the same
 good, wild, and sacred dwelling within ourselves.

There have been times when people were aware of the sacred dwelling
 close at hand. Snyder (1984) notes that most archaic and non-literate
 peoples believed parts of the landscape to be sacred. Anne Bancroft
 describes their perception:

Once [t]he physical formations of rocks, trees,
 rivers and hills were luminous with meaning. The material
 world was seen as alive and beautiful and providing a sacred
 arena for human beings and their activities. . . . The
 possibility of direct experience with the divine at many
 levels was there and gave significance to impressions that
 have become meaningless or trivial today . . . (1987, p. 2)

In modern western culture, such divinity-laden perceptions go virtually
 unrecognized; however, we can rediscover and deepen our sense of them by
 looking at how 'the sacred' appears to various aboriginal peoples.
 Australian aboriginals have sacred "places of teaching" called dreaming
 spots. "Each of them [is] out of the ordinary, a little fantastic even
 . . ." (Snyder, 1984, p. 5). Often, these dreaming spots are shared
 with totem ancestors, like the honey-ants or parrots who actually live

there. Here, the sacred ". . . comes together with a sense of optimal habitat of certain kinfolk . . . red kangaroos, bush turkeys, lizards" (Snyder, p. 14).

For Japan's aboriginal people, the Ainu, sacred power was embodied in 'fields':

Their term *iworu* means 'field' with implications of watershed, plant and animal life, and spirit force. . . . They . . . speak of the *iworu* of the salmon, which means the lower watersheds with all their tributaries and the plant communities along those valleys that focus on the streams where salmon run. (Snyder, 1984, p. 16)

Remnants of the ancient Ainu's *iworu* are found in Japan's more modern Shinto tradition. The name has been changed but the essence remains.

Kami are

. . . the formless little powers present in everything to some degree but intensified in power and in presence in outstanding objects, such as large curiously twisted rocks, very old trees, or thundering misty waterfalls. Anomalies and beauties of the landscape are all signs of kami--spirit power, spirit presence, energy. (Snyder, 1984, pp. 17-18)

A helpful description of these sacred powers is given by Chögyam Trungpa, scholar and practitioner of the Tibetan Vajrayana Buddhist tradition (in Hayward, 1984). Buddhists perceive these luminous forces as *dralas*--"energies beyond aggression" (Hayward, p. 294). Hayward describes *dralas* as:

. . . forces or embodiments of power in the phenomenal world which can be directly experienced in the human organism when we are able to tune our perception to them. They are not "supernatural," but are larger patterns of coherent energy and relationships than those which are normally catalysts of human perception. (p. 294)

Trungpa emphasizes the *dralas*' actuality:

Drala could almost be called an entity. It . . . is an individual strength that does exist. Therefore, we not only speak of drala principle, but we speak of meeting the 'dralas'. The dralas are the elements of reality--water of water, fire of fire, earth of earth-- anything that connects you with the elemental quality of reality, anything that reminds you of the depth of perception. There are dralas in the rocks or the trees or the mountains or a snowflake. . . . When you make that connection with the elemental quality of the world, you are meeting dralas on the spot We always have possibilities of discovering magic Whether you communicate with it or not, the magical strength and wisdom of reality are always there . . . (in Hayward, p. 295)

These examples of dreaming spots, iworu, kami, and dralas evince the world-view described by Bancroft of life as "alive and beautiful", unfolding in a "sacred arena", and holding for those who participate "the possibility of direct experience" of the divine, in "rivers and hills . . . luminous with meaning."

It is a mistake to dismiss such perceptions as archaic or naive nature worship. As dralas existed in ancient times, so they exist today. Intimations of them are found in works of river writers.

When Haig-Brown speaks of "the strong, quick life of rivers", their "cold grayness . . . under rain", how they "sparkle in the sun", and his own feet setting down hard "on rocks or sand or gravel", I suggest he is meeting river dralas.

When Williams refers to rivertops as "magnetized wires drawing and concentrating all the best things forests have", is he not referring to the iworu, the 'fields' around rivertops? Or, when Muir hears the mountain streams "chanting all together in one grand anthem" and comprehends them "in a clear inner vision", is he not meeting dralas dwelling in Sierra Nevada?

Sensing in the canyons something akin to locus Dei, Abbey is apprehending the kami of the canyons. And when he feels himself drifting "deeper and deeper and deeper into the fantastic", is he not experiencing something akin to aboriginal dreamtime?

When Lopez takes the measure of the river by "the sound of water on the outer bar", and "the hunt of the caddis fly", he seems to be surrendering to the kami inherent in his river. And when Maclean perceives the heat mirages above the river joining hands and dancing "through each other" and "around each other" he apprehends the dralas of the Big Blackfoot River.

Many examples could be cited. Through intimacy with "rivers . . . luminous with meaning", river writers come to know the rivers' drala natures, or their sacredness. In writing poetically about their experiences river writers are attempting to capture and communicate a sense of these ineffable "sacred arenas."

A number of points about these perceptions and ecological soundness need to be made. In sensing in rivers more than just water, river writers break-up enervating conceptual log jams. Their expanded perceptions intimate rivers' greater riches. In turn, this encourages respect, and our giving to rivers "the kindness [we] would any brother."

As well, such refined perceptions demand we listen to rivers and be led by them, as Lopez does when he takes the measure of the river in natural phenomena. He surrenders human contrivances in favour of the river's knowing. This awareness, of needing to surrender to the knowing inherent in 'things not of our making', is healthy because it helps deconstruct our arrogance. Most unsound ecologically is the highly

valued perception that humans are the knowers and arbitrators of all, and thereby, all things are measured by us, all values decreed. Meeting the river dralas topples us from our imperialist position. Arrogance is replaced by humility.

Lastly, in perceiving the sacred which dwells in and around rivers we come to see ourselves in the same light. Like Ehrlich, we "constantly . . . stumble on divinity", in rivers and raindrops, in mind and soul. Such perceptions are at once humbling and exalting. Their ecological health lies in the spiritual refreshment they afford. We experience in ourselves new depths, and new kinds of pleasure, pleasures that are healthy because we consume nothing, waste nothing, harm nothing. Further, intimations of river dralas encourage us not only to "let it be" but also to celebrate being. River writings attest to this.

Flow and Poetics, The Paradigm of Poiesis

One of the deepest streams in the braid is the perception of flow. Of all the streams, flow holds great promise in revisioning healthier attitudes and lifestyles. A few passages illustrate some important features of flow.

One feature of flow, a sub-perception, is its universality. Muir saw "everything . . . flowing", as did Thoreau: "All things seemed with us to flow." And they meant everything. For Thoreau, shore, cliffs, air, trees, sap, and rivers of rock flowed, all the while his "thoughts flowed and circulated" in a "portion of time [that] was the current hour." For Muir, water, glaciers, snow, avalanches, leaves, seeds, flowed, "While the stars go streaming through space."

The perception of everything flowing is complemented by the awareness of flow as eternally recurrent. Muir hints at this when he continues his description, saying the flow "pulsed on and on forever." On his float in the Platte, Eiseley sees himself as a minute pulse "like the eternal pulse that lifts Himalayas and which, in the following systole, will carry them away." Ehrlich stumbles on divine recurrence in a mountain river, which "feeds, spills, falls, and feeds itself over and over again". And Lopez finds personal reassurance in the "sacred order" which is so apparent in the "salmon coming upstream to spawn and die." In these passages the flow is recurrent, like a pulse, repeatedly rising and falling, spawning and dying, lifting and carrying away.

Out of this universal pulse comes the idea of poetics, a core ecological perception. Poetics is that phase of the life pulse which is always bringing forth, arising, lifting, spawning, renewing, birthing. Poetics is fecund both in life and as an idea. Its essential force is illustrated by two of life's mysteries.

Life creates out of itself more life. It was the late Robert H. Whittaker, botanist and theoretical ecologist, who first noted that life's "[d]iversity . . . creates and sustains diversity" (Norton, 1987, p. 18). Bryan Norton summarizes:

So biology mimics theology. Its ultimate explanation is that life, wherever it came from, creates itself. The force of nature is in this respect Godlike; the earth's community of life is a self-moved mover. (p. 18)

Equally important, is the fact that all life's occurrences are values. Building on one of Whitehead's central insights, Birch and Cobb (1981) emphasize that ". . . life is bound up with an urge to live. It

is not a mere fact; it is a value. That is, being alive is valuable in itself" (p. 106). This harkens back to the chief existential fact of my 'thrownness into a world of natural goodness'. This obvious a priori value, the value inherent in being before any human intervention, grounds my epistemology. Everywhere I look I see the 'things' that share my world as self-intending, each one a projection of life, each one bringing forth value in and for itself, each one amazing, beautiful, mysterious. Yes, Mr. Abbey, "if only we had the eyes to see"!

In bringing emphasis to the idea and word poetics, my intention is to capture life's essence: life mysterious bringing forth out of itself, new life--what the ancient Greeks called poiesi Heidegger (1977) is helpful here:

It is of utmost importance that we think bringing-forth in its full scope and at the same time in the sense in which the Greeks thought it. Not only handicraft manufacture, not only artistic and poetical bringing into appearance and concrete imagery, is a bringing-forth, poiesis. Physis also, the arising of something from out of itself, is a bringing-forth, poiesis. Physis is indeed poiesis in the highest sense. For what presences by means of physis has the bursting open belonging to bringing-forth, e.g., the bursting of a blossom into bloom . . . (p. 293)

With physis meaning "All that which occurs in the natural order of things . . ." (Angeles, 1981, p. 213), we may come easily to understanding that Nature, or Life, "in its highest sense" is, through and through, poetic.

River writers have a keen awareness of poetics. In the I Ching, poetics is the water "in motion on earth in streams and rivers, giving rise to all life." For Annie Dillard the creeks are poetic, "an active mystery, fresh every minute. Theirs is the mystery of the continuous

creation . . ." Ehrlich sees poetics flowing both in rivers, feeding themselves "over and over again", and in wildness, "the source and fruition at once".

Life's mysterious poeticizing is informing and inspiring. Based on my awareness of life's essential poiesis, the name I give to my "throwness into a world of goodness" is **The Poetic**. I call this paradigm **The Paradigm of Poiesis**.

This natural bringing forth, or poeticizing, suggests a direction for developing consciousness. Recalling Georgescu-Roegen's words that "entropic transmutation occurs in the same direction as the stream of our consciousness", poiesis then presents alternatives to current entropic streams of mind. Rather than continuing in our roles as aggravators of entropy, maintaining crippling commitments to raw resource and other techno-material development alone, we may realign ourselves with life's natural poetics and become, instead, agents of poiesis. Wendell Berry captures the sense I mean:

When one lives as a creature within creation, aligned with it, then one's life passes through the world as a creative force or agent, like a stream of water. Then one can hear "the songs that travel through the air" like the Indians of the Peyote Meeting. (1970, p. 37)

In aligning ourselves with life's current, not only do we hear 'drala music', we participate in its making as well.

Prizing 'Pleasures of the Heart'

This last theme is the main channel, feeding all the streams in the perceptual braid. It is the awareness of the basic pleasure riparian

experience affords, and is the reason river writers commit themselves to sharing their experiences. I call the overarching theme prizing 'pleasures of the heart'. These pleasures are the reason to nurture along more poetic lines.

Of pleasure and the heart Hawthorne wrote that the "broad and peaceful meadows . . . are among the most satisfying objects of natural scenery. The heart reposes on them with a feeling that few things else can give . . ." He relates a unique pleasure in communing with the meadows, and is most satisfied by their "quiet beauty".

Thoreau takes delight in being a well employed witness. He writes, the haymakers "may think we are idlers. . . [but] We too are harvesting an annual crop with our eyes". The crop appropriated is nature's beauty, a pleasure of the heart.

Another pleasure is the awareness of life's phenomena as manifestations of some underlying good. Muir says "All these varied forms, high and low, are simply portions of God, radiated from Him as a sun, and made terrestrial by the clothes they wear . . ." Ehrlich stumbles on divinity in the wilderness: "Everywhere I look I see the possibility of love." Williams says all wild things around rivotops are equally infatuating; and adds "Come to think of it, to me each of these good things are all of them and more". Here, Williams prizes the goodness uniting wild creatures. In relating a Quotaka story, Lopez gives voice to a similar perception:

Then a very odd thing happened--the river said it loved the salmon. No one had ever said anything like this before. . . . It was an honesty that pleased everyone. It made for a very deep agreement among them.

. . . . When you feel the river shuddering against your legs, you are feeling the presence of all these agreements. (1979, p. 62)

The agreements are the "obligations and the mutual courtesies" (p. 61) implicit in the workings of the riparian ecosystem. There is pleasure in giving to wild things respect and courtesy.

Another heart pleasure is in the self's identification with the natural order. Lopez's perception of being part of the bend in the river "dismantled [his] loneliness." Each day he feels more of himself slipping away, and he knows "a compassion that staggers." Eiseley, "having been a part of the flow of the river", would "feel no envy" should God decide to create a being "more beautiful than man". The river dissolves arrogance. Great pleasure is experienced when we release ourselves from the enervating need to be the measure of all things. Letting go exhilarates.

A final heart pleasure comes in the respect river writers show to the mystery at the core of life. Annie Dillard sees her creeks as "an active mystery, fresh every minute". For Ehrlich the mystery is manifested in wildness, which "has no conditions, no sure routes, no peaks, or goals, no source at . . . not instantly becoming something more than itself." The essence of the mysterious is captured by Haig-Brown: "there is is no exhaustion to the growth of love through knowledge . . . because the knowledge can never be complete . . . there will always be something ahead, something more to know."

The "beautiful experience" Einstein refers to in the epigraph to this chapter describes a 'pleasure of the heart'. Riparian perceptions intimate such pleasures and are prized as such. The river writers'

prizing, expressed both in words and their endless return to their sources of inspiration, warrants attention. Consider John Livingston's (1981) words:

I believe we are what we perceive, no more--and no less. This is not meant to be a value statement; it is a descriptive statement. I have been a naturalist and preservationist for over forty years. If you are not a naturalist, then I have perceived more widely than you have. (This is not meant to sound presumptuous; if your experience, however rich, has been entirely in the human context, then mine has been richer.) (p. 97)

River experience affords the building of the rich perceptual repertoires Livingston refers to. River writers, like other naturalists, have had experiences and cultivated perceptions those unfamiliar with rivers, or similar wild places, simply cannot know. Hawthorne's reflection on meadows bears repeating: "The heart reposes on them with a feeling that few things else can give." Such pleasures are highly prized.

The commitment to cultivating the 'pleasures of the heart' suggests an overall ecological soundness. In cultivating spiritual riches, material riches become what all along they should have been, the means to more satisfying and pleasurable ends, but not the end itself. By discovering spiritual riches in first-hand encounters with wildness, those who participate increase their own pleasure. Because they are celebrating the creation rather than harvesting it, they increase pleasure within their horizons. By adopting an attitude of celebration, pressure on ecosystems is released, and pleasure, life's reason, is increased all around.

CHAPTER VI

ECOPOETIC NURTURING

. . . ecology may well find its proper disciplines in the arts, whose function it is to refine and enliven perception, for ecological principle, however publicly approved, can be enacted only upon the basis of each [person's] perception of his relation to the world.

-Wendell Berry

Ecopoetics

Toward considering key factors which contribute to the nurturing such ecologically-sound perceptions as found in river writers, it helps to see these writers in the light of the larger community they participate in. For rivers and streams are not the only beauties celebrated by river writers. Abbey wrote about southern deserts; Ehrlich prizes the openness of the great plains; and Muir loved the mountains. River writers are a sub-set of the greater circle of artists I call **ecopoets**.

Ecopoets are distinguished by a shared vision, a sense of which is held in the etymological roots of ecopoetic. Eco from the Greek oikos stands for **home** and **household**. Poet and poetics prefixed with **eco** emphasizes planet Earth is our home. At face value "Earth is our home" is a benign statement; it can mean different things to different people. Hence, we need to understand how this knowledge is significant for the ecopoet.

The awareness that Earth is home is unabashedly spiritual. In this sense:

[It is] our richest, deepest, most open and most meaningful experience-of-Being; it is the attitude in which we hold ourselves most open, and most receptive to, the primordial presencing . . . of Being. (Levin, 1985, p. 178)

Through encounters with the natural world ecopoets come to perceive earthly occasions as manifestations of divine presence. Hence, Heaven and Earth are radically one. Elizabeth Barrett Browning wrote: "The earth is crammed with Heaven".

Eco means then "Earth is our home" and "Earth is heavenly." On this foundational awareness the ecopoet joyfully submits to the practice of celebration.

To celebrate means to "make some demonstration of respect or rejoicing" (Fernald, 1947, p. 115). The ecopoet, in the light of heaven which illuminates Earth, demonstrates respect by bringing forth into being a refined sense, or an essential statement, of personal vision. Whether he paints or writes, the attitude is poetic. As R. H. Blyth notes, poetry is not only words ". . . but the mode of activity of the mind of the poet" (Quoted in Berry, 1970, p. 15). "In other words" writes Berry, "it is not only a technique and medium, but a power as well, a power to apprehend the unity, the sacred tie, that holds life together" (p. 15).

This power to apprehend the "sacred tie" between heaven and Earth makes a poet an ecopoet. Berry underscores my emphasis on eco, oikos, and Earth, though I quote him at this point toward a different end:

There must be new contact between men and the earth; the earth must be newly seen and heard and felt and smelled and

tasted [S]uch an era . . . will arrive and remain by the means of a new speech--a speech that will cause the world to live and thrive in men's minds. (1970, p. 14)

Quintessential to the poet's mandate, as Berry intimates, is the understanding that the transformation and clarified perception sought takes place in the mind. Many artists know this. Rilke expresses it passionately:

Nature, the things of our daily contact and use, all these are preliminaries and transiciencies: however, they are, as long as we are here, our possession, our friendship, participants of our pain and pleasure, in the same way as they were the trusted friends of our ancestors. Therefore we should not only refrain from vilifying and deprecating all that which belongs to this our world, but on the contrary, on account of its very preliminary nature which it shares with us, these phenomena and things should be understood and transformed by us in the innermost sense. -- Transformed? -- Yes, because it our task to impress upon our selves this preliminary transient earth in so deep, so painful, so passionate a manner, that its essential nature is 'invisibly' resurrected within us. (1986, p. 3)

The eco-poet's clarifying of perception--the unconcealing of the "sacred tie"--is a bringing forth into consciousness new meaning. Nothing 'out there' changes, but what does change is the inner attitude, which is everything. So whatever 'in the world' remains concealed does so in and by minds. In the flash of light when heaven reveals itself the " . . . real miracle is the transformation of the natural by a higher level of meaning" (Scott, 1985, p. 193).

Whether the eco-poet is a painter, musician, or wilderness guide; whether the terrain is mountains, prairie, or the seashore; he devotes himself to the celebration of Earth. River writers are exemplars.

The 'hows' of celebration are as rich as the artists, media, and audiences involved, but the hallmark of the eco-poet is manifested in his

approach to the world. This attitude, writes Levin, is one "in which we hold ourselves most open, and most receptive." Above I used the word submit, which means "to bend humbly". Lopez says listening is the key. Canadian photographer Sherman Hines provides an excellent summary of the approach:

Someone asked me once how I got to the spot where I actually took a photograph. I found that I followed noises, clouds, the winds, smells -- but most of all it was the light that guided me. I don't force myself on the environment; I let it manipulate me. There's no confrontation with nature, because I give in to it. I let myself be seduced completely. (1988, n.p.)

Yes. To be completely seduced by the light. Another 'pleasure of the heart'.

Nurturing Eco-poetic Perceptions

The notes which follow are intended to generate thought and discussion about the life-worlds we want to create for ourselves and our children. They delineate neither a program for nurturing "deep ecology" perceptions (Devall & Sessions, 1984), nor a curriculum for the education of eco-poets; the knowledge sought is inherently anti-programmatic. Rather, some of the key factors which contribute to nurturing eco-poetic perceptions are highlighted.

Wild Places

The sine qua non in nurturing eco-perceptions is personal immersion in wildness, natural settings undefiled by humans. Although wilderness is ideal, few such areas remain on Earth. Natural environments are prime because they are sacred areas wherein we may experience our

kinship with Earth. While the concept of being one with the natural order may be easy to grasp, it remains an abstraction, easily forgotten without the vivifying experience of oneness. Art historian Bernard Berenson's experience of unity is quoted by Storr (1988):

It was a morning in early summer. A silver haze shimmered and trembled over the lime trees. The air was laden with their fragrance. The temperature was like a caress. I remember -- I need not recall -- that I climbed up a tree stump and felt suddenly immersed in itness. I did not call it by that name. I had no need for words. It and I were one. (p. 17)

For Berenson the experience was indelible; he did not need to recall it. Support for the primacy of first-hand experience with wildness is provided by river writers. Henry Van Dyke writes:

. . . the real way to know a little river is not to glance at it here or there in the course of a hasty journey, nor to become acquainted with it after it has been partly civilized and partly spoiled by too close contact with the works of man. You must go to its native haunts . . . you must accommodate yourself to its pace, and give yourself to its influence . . . the essential thing is that you must be willing and glad to be led . . . The stream can show you, better than any teacher, how nature works her enchantments with colour and music. (1895, pp. 20-21)

The key is joyful surrender to things not of our making. In leaving behind our abstractions and artifacts we come to see ". . . that nature does have a sense of its own, an integral mode of meaningful being" (Kohak, 1984, p. 69). Immersed in wildness we can, like Emerson, "read God directly". The experience delights and enlightens.

There will be those who argue that going into wilderness is a frill, that we need first to improve life in human settings. This notion is mistaken, as Kohak, and others understand: "To recover the moral sense of our humanity, we would need to recover first the moral

sense of nature" (1984, p. 13). In other words, the path to healthier human existence cuts first through wilderness. Thoreau knew this: "In wildness is the preservation of the world", as did Leopold:

[Wilderness is the] single starting-point, to which man returns again and again to organize yet another search for a durable scale of values. . . . raw wilderness gives definition and meaning to the human enterprise. (1966, p. 279)

Immersion in wilderness is not always practicable. Sometimes reasonable facsimiles have to suffice. Even cultivated areas provide some contact with nature. "The important thing is to get children outdoors so they may have the richest possible opportunity to learn first hand the lessons nature has to teach" (Heffernan, 1972, p. 6). Not only children, parents and educators as well.

As for dwelling in the wilds, the ideal is to be as close to the elements as conditions allow, not staying for a few days, but for extended periods, durations where the gradual changes brought on by the seasons can be felt. Haig-Brown's sojourns by the Campbell were year-round. Muir lived for long durations, in all seasons, in the Sierras, and Annie Dillard lived a year or so at Tinker Creek.

Also, it is important to grasp that the experiences of river writers took place along familiar rivers. The intimacy and love which developed grew out of repeated visits to favourite spots. For Maclean, the Big Blackfoot was a family river, and Van Dyke knew intimately the Beaverkill. The same is true for every river writer. The human heart needs, and finds its home--"reposes" to use Hawthorne's apt word--in natural, earthy places. William Carlos Williams emphasized, there are

"No ideas but in things". By the same token, as Vine Deloria (1973) showed in his study of Native American spirituality, there can be (paraphrasing) "no experience of the sacred but in places". Bonding with a place encourages us to know and care for it as kin. This requires time and understanding, as Haig-Brown pointed out. One-shot excursions do not suffice. Though we are only visitors to them, wild places must become familiar places. Like rivers, they are our brothers.

Passive Poetics

Although encounter with wildness is the primary factor in opening the mind to the luminosity of the world, other factors are implicated. The most important of these is human poetics, which has an active and passive phase. Through reading the words of others or dialoguing with them about wilderness; through viewing graphic media; through guided interpretations; through any number of cultural ways, we clarify, refine, and validate our perceptions, and deepen our understanding and pleasure.

River writers were familiar with the poetics of others. Edward Abbey took Thoreau's Walden with him on a float down the Green River, and titled his essay about the experience "Down the River with Henry Thoreau" (1982). Annie Dillard devotes a chapter in her autobiography

An American Childhood to the books that nurtured her perceptions:

What I sought in books was imagination. It was depth, depth of thought and feeling I myself was getting wild; I wanted wildness, originality, genius, rapture, hope. (1987, p. 183)

Most texts of river poets are peppered with references to artists, philosophers, and writers, suggesting they have read and been fed on the poetics of others.

Weatherly (1985) comments on the fundamental place of the arts in apprehending the "sacred tie":

That environmental literature is closely related to music and art has become clear to me now: I find that I can no longer teach literature without bringing in these arts. I am convinced too that love for the environment and one's place is a potent source of inspiration for all artists, for art is always about landscape, literal and psychic, and the attempt to get back to the garden. (pp. 75-76)

My experience supports Weatherly's claim. While wilderness literature is the main staple--outside wilderness immersion itself--in refining my perceptions of wildness, graphic arts and music also figure significantly. Cezanne's paintings, in particular his landscapes, often draw me into deep contemplation. And on hearing certain of Bach's concertos, I am always moved by the vibrant, wild images his transcending chords evoke.

In encountering art, science, and the beliefs of others, all expressions of how the world is perceived, often our own assumptions and ingrained cultural behaviours are challenged. If we are receptive, we change our assumptions and beliefs. The effect is liberating.

So in nurturing eco-perceptions, while personal immersion in wilderness is crucial, just as important are our 'dialogues' with those who have experienced similar territory.

Active Poetics

Experiences of wilderness may involve the practice of disciplines, activities, or vehicles, which help refine and enhance wilderness meaning. Although various, these disciplines are characterized by their low-impact on the environment and their power to engage participants deeply in their surroundings. Hiking or backpacking, canoeing or rafting, fly-fishing, bird watching, mushroom picking, and orienteering, are typical examples. Haig-Brown was an ardent fly-fisherman, and Abbey an inveterate river rat.

These disciplines need not require clear-cut methods or regalia. John Fowles's discipline is unadorned: "I like a kind of wandering wood acquaintance, and no more; a dilettante's not a virtuoso's; always the green chaos rather than the printed map" (1979, p. 57).

Within poetic disciplines which help us apprehend the 'sacred tie' are deliberately aesthetic disciplines, like painting, writing, and photography. In passive poetics we apprehend the visions of others; in active poetics we create and refine our own. The essential difference between the two can be drawn from Graber (1976); here, extrapolating, 'object' refers to the wilderness, and 'subject' to the poet:

Inward action [passive poetics] is the interplay within the subject's mind between the object itself and the subject's perception of the object. Inward action is a process of intellectual clarification and emotional intensification, leading to the emergence of the subject as an experiential center for the subject's inner life. (p. 31)

Passive poetics, apprehending an other's meaning in books or film, etc., goes no further than what Graber has just described. Active poetics does:

Outward action, in contrast, is the subject's material expression of his inward action. The act of giving concrete form to inward action changes inward action itself and prepares the subject for his next new outward action. It is a developmental, or organic process . . . (p. 31)

Although for any individual, outward action may not be necessary in achieving the requisite eco-perceptions, it is central to eco-poetic disciplines. In outward action a person takes responsibility to shape and refine his own perceptions of the world. It should be obvious that this is precisely what river writers do. The integrative process is described by Lutts (1985):

A student who steps out of the woods, sits down, and writes a piece of literary natural history is engaging in this interplay [between scientific and poetic perceptions] in an educationally profound manner, for he or she is beginning to integrate thoughts, feelings, and actions. This is a step toward reuniting the rational, emotional, and physical aspects of our being, among which our culture long ago drove a wedge. This reunion is an important and necessary step toward dealing with our environmental problems. (p. 52)

In bringing forth ideas one shares in the construction of reality. Discovery of the 'real' demands our fabrication of it. In the end, richness, diversity, and greater meaning accrue, and the sacred tie is strengthened.

Mentors

Initially our world is coloured by the eyes and thoughts of those who first nurture us, usually our parents. From my own experience, I know Mum and Dad ensured not only that we kids had lots of exposure to wild things and places, but also that we came to appreciate nature for the marvel and beauty it is. They were constantly alerting us to birds,

snakes and turtles, and would not tolerate the mistreatment of animals or plants. Rachel Carson wrote:

If a child is to keep alive his inborn sense of wonder . . . he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in. (1956, p. 45)

In nurturing eco-perceptions it is important that those who are being educated have guides who are enthused about wildness. For a time, Emerson was a mentor to Muir. Norman Maclean and his brother came to love the Big Blackfoot river on outings with their father, a Presbyterian minister: ". . . in a typical week of our childhood Paul and I probably received as many hours of instruction in fly-fishing as we did in all other spiritual matters" (1976, p. 2). In Dillard's autobiography she recounts how her parents provided the opportunities and modelled the anarchy that was so instrumental to her own development. For example, after reading Twain's Life on the Mississippi, her father quit his job, bought a riverboat, and motored down the same river.

Rachel Carson makes an important distinction:

I sincerely believe that for the child, and for the parent seeking to guide him, it is not half so important to know as to feel. If facts are the seeds that later produce knowledge and wisdom, then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow. (1956, p. 45)

Putting feeling and emotions before facts is crucial to nurturing wonder, an essential ecological perception.

My experience of others with a sensitivity to the 'sacred tie', suggests the core attribute of an effective mentor is gentleness. This

subtle feature in others is unmistakable. Difficult to put into words, Van Dyke, in Little Rivers, intimates nicely this quality:

Little rivers seem to have the indefinable quality that belongs to certain people in the world, -- the power of drawing attention without courting it, the faculty of exciting interest by their very presence and way of doing things. (1895, p. 19)

If you know brooks and streams the meaning carries. Perhaps gentleness is the key. Trungpa says "When you are fully gentle without arrogance you see the brilliance of the universe. You develop a true perception of the universe" (in Hayward, 1984, p. 293). Further, he says:

The only way to contact [the energy beyond aggression] is to experience a gentle state of being within yourself. So the discovery of drala is not coincidental. To connect with the fundamental magic of reality, there has to be gentleness and openness in you already. Otherwise, there is no way to recognize the energy of nonaggression, the energy of drala, in the world. (p. 299)

Given that ". . . the principal and most effective form of instruction we can practice is the example our own conduct provides those who are touched by it" (Weizenbaum, 1976, p. 267), it makes sense, in guiding others to see Earth's dralas and their own drala nature, that mentors be gentle.

Solitude

For many the experience of the natural world is an intimate and solitary pleasure. Morrison (1986) and her co-researchers experienced the wilderness solo to be re-creational or therapeutic. Anthony Storr (1988) found the experience of solitude to be a crucial ingredient in the lives of many creative individuals:

. . . if it is considered desirable to foster the growth of the child's imaginative capacity, we should ensure that our

children, when they are old enough to enjoy it, are given time and opportunity for solitude. Many creative adults have left accounts of childhood feelings of mystical union with Nature; peculiar states of awareness, or 'Intimations of Immortality' as Wordsworth called them. (p. 17)

Solitude in natural settings gives persons a rare chance to get in touch with themselves, their own deepest thoughts and feelings. Jane Goodall describes a time when she was alone:

It is a period I remember vividly, not only because I was beginning to accomplish something at last, but also because of the delight I felt from being completely by myself. For those who love to be alone with nature I need add nothing . . . no words of mine could convey even in part, the almost mystical awareness of beauty and eternity that accompany certain treasured moments. (in Griffin, 1978, p. 196)

We see the same prizing of solitude in our river writers. Dillard was alone at Tinker Creek, and Muir alone in the mountains. In a chapter entitled "Solitude" in Thoreau's classic Walden, he writes, "I love to be alone. I never found the companion that was so companionable as solitude" (1954, p. 94). Abbey, as the title of his most notable work suggests, spent seasons alone in the slickrock country of Utah, and loved it:

I wait. Now the night flows back, the mighty stillness embraces and includes me; I can see the stars again and the world of starlight. I am twenty miles of more from the nearest fellow human, but instead of loneliness I feel loveliness. Loveliness and a quiet exultation. (1968, p. 15)

Conclusion

For two reasons I have not included in this inquiry thoughts about how nurturing eco-perceptions might interface with current public education. First, my sense of the environmental crisis precipitates my

conviction that children--though I believe they should be exposed to the factors I sketched above--are the ones least in need of acquiring more ecologically-sound perceptions. The old Crosbie, Stills, Nash and Young line "Children teach your parents well" is as true today as it was in the sixties, and as it was in Christ's time.

Second, education as it is now conceived is rooted in the entrenched paradigm of limitless economic growth, with science and technology as the prized handmaidens, mere instruments, to this dominant mindset. Recall that after the government of Alberta brought out in 1984 its white paper entitled "Proposals for an Industrial and Science Strategy for Albertans: 1985 to 1990", Alberta Education brought out in the next year a white paper outlining the new directional policy for secondary education. An examination of the two papers shows education is meant primarily to serve the goals of an industrial marketplace economy.

In light of these points I stress eco-perceptions are not 'complements' to be added to the existing mindset. Rather, their nurturing assumes a radical reconstitution of how we see, think about, and treat life on Earth. Fritz Schumacher encapsulates our challenge:

We shrink back from the truth if we believe that the destructive forces of the modern world can be "brought under control" simply by mobilising more resources--of wealth, education, and research--to fight pollution, to preserve wildlife, to discover new sources of energy, and to arrive at more effective agreements on peaceful coexistence. Needless to say, wealth, education, research, and many other things are needed for any civilization, but what is most needed today is a revision of the ends which these means are meant to serve. And this implies, above all else, the development of a life-style which accords material things

their proper, legitimate place, which is secondary and not primary. (1973, p. 294).

The eco-poetic world-view warrants strong consideration in our quest for life-styles that are ecologically sound. Eco-perceptions are primary, and deserving of a place at the core of any education. Based on experience of them both, I assert, knowing river dralas is more important, and more pleasurable, than knowing how to run a computer.

For those who see value in eco-perceptions the task is to dialogue with others toward finding practical ways of nurturing these perceptions in ourselves. The eco-poets and I have pointed to some concrete factors basic to the acquisition of eco-perceptions. While our journey may be long, it begins with the first step.

Those taking the first step must keep in mind one thing there are no guides along the way, save for wildness itself. Recall the insight of a favourite eco-poet and wilderness traveller:

Behold the lilies of the field, how they grow: they neither
toil nor spin; and yet I say to you that even Solomon in all
his glory was not arrayed like one of these.

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