Loss of the human capacity for interspecies communication

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LOSS OF THE HUMAN CAPACITY
FOR INTERSPECIES COMMUNICATION

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The human species is rapidly losing the capacity for communication with the other animal species. This loss is responsible for the unnecessary destruction of members of those species for which humans have not conceived a self-interested use. This thesis is an interdisciplinary examination of historical and contemporary aspects of the communication between human and nonhuman species focussing on patterns or trends that repeat themselves through time and across cultures. It is based on a literature search but at times relies on firsthand experience.

Interspecies communication is viewed biologically as a mutual signalling system for the benefit of both parties. It is a form of cooperation. The ability to signal and receive information about intentions, emotional states, etc. is what enables the coexistence of any two organisms or species. The perceptions of an animal determine his/her actions, but the cultural or societal medium affects her/his predisposition or attitude towards the incoming sensations. Therefore, to change the way people perceive and respond to the other animal species, we must change the societal/cultural attitude toward other beings.

The relegation of other beings to the category of "object" may be attributed to the cultural denigration of communal, life-affirming values in favor of self-interested, "profit and power" worldview. The latter is a social construct coinciding with the fairly recent (5-6,000 years ago) advent of androcentric patriarchies following almost 25,000 years of primary female deification with concomitant valuing of all life forms and processes. In androcentric societies there is an imbalance or "unnaturalism" which adversely affects the latter valuations with resultant fragmentation and isolation of people from each other, members of other species, and the natural world. To redress this imbalance, it is necessary to move from gender-biased patriarchy to an equal partnership status inclusive of the voices and perspectives of both women and men.
For my family and friends who clipped articles and bought books for years ... and for Masi the Navajo cat who, in the name of love, was left behind to die.
T. H. Huxley remarked that the most important conclusion he had gleaned from his anatomical studies was the interrelatedness of all life on Earth. The discoveries made since his time—that all life on Earth uses nucleic acids and proteins, that the DNA messages are all written in the same language and all transcribed into the same language, that so many genetic sequences in very different beings are held in common—deepen and broaden the power of this insight. No matter where we think we are on that continuum between altruism and selfishness, with every layer of the mystery we strip away, our circle of kinship widens.

- Carl Sagan and Ann Druyan
(1992:118)
PREFACE

Six years ago, struck by the correlation between vanishing wildlife communities and the disintegration of human societies historically proximal to them, I began graduate studies seeking evidence for an intuitive bond to wild animals common to all peoples. My hope was to shed some light on problems believed to spell the twilight of East African wildlife. Truly it seemed a hopeless muddle of vanishing plant and animal species, and total anomie within the bordering human communities.

Since then, things appear to have taken a turn for the better: the shattering influence of colonialism has been universally recognized, as has the urgency of the species extinction problem. While this in no way reverses the tides accelerated by the industrial revolution, it has given enough breathing space to a concerned world community to roll up its sleeves and tackle the ugliness of what is seen in the mirror.

Tracking on "the bond" has entailed reading widely--wildlife biology and conservation, geography and anthropology, history and prehistory, psychology and cognitive ethology. I have scrutinized the publications of IUCN's (now the WCU) captive breeding and reintroduction specialists as well as the folk tales of China and the myths of the Selk'nam of Tierra del Fuego. Much to the dismay of
my thesis committee, I was diffusing instead of focusing. The whole project appeared to be getting out of hand when one day a coworker, knowing of my involvement with animals, dropped on my desk a slim paperback entitled Animal Talk: Interspecies Telepathic Communication by Penelope Smith. I took the book home and read it.

One of the major barriers to receiving communication from animals is allowing your own thoughts, distractions, or preconceived notions to interfere. You need to be quietly receptive to what animals wish to relay. ....

Don't try to get his/her attention or do anything. Just look at the animal quietly. Let all distractions, thoughts, or pictures of other things melt away, and focus softly on the animal. ....

After doing this awhile, you probably will have experienced heightened awareness or clearer perceptions about yourself and animals (1982:25).

Communication... to impart knowledge of each other, to each other; to give or interchange thoughts, feelings, information or the like; to share.

In Western therapeutic practices such as helping seriously withdrawn or infirmed people—autistic children being perhaps the most dramatic example—domestic animals are used to draw the patient outside of him/herself and make human communication possible. The repeated success of this procedure acknowledges the predilection for human-nonhuman understanding at a very basic, i.e. intuitive, level.

Communication... understanding what the other needs, wants, or expects from you. A two-way flow. It requires awareness. It requires focusing. Contrary to popular
belief, people who are loners probably do not anthropomorphize their companion animals. Rather they are without the constant distraction of other humans and therefore see more clearly. The same phenomenon occurs when hiking alone versus with human companions; one is more aware of, or tuned in to, the surroundings.

Reading Animal Talk it became clear to me that the bond I was searching for was none other than communication. As the saying goes, "the obvious always takes a little longer"! It redefined for me my interactions with both wild and domestic animals over many years. It has been a "communication"—call it the ability to empathize and respond, if you will.

It is my hope and intention in the following pages to bring together thoughts and facts about the relationship between human and nonhuman species from across disciplines, and to present these in nonacademic language so that the thesis may be widely useful. It's my personal attempt toward rectifying the wrongs humans, and in particular my own society, have done and do today to the other animal species and also thereby to themselves.
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The photograph on page iv is from an issue of The Peregrine Fund Newsletter (Cornell University, Ithaca, New York) of the mid-1980s. I have kept the photo for so long that I can no longer appropriately reference it. The Peregrine Fund is now located at (and operates) the World Center for Birds of Prey, Boise, Idaho.
The awesome thing to contemplate is how our forefathers managed to kill tens upon tens of thousands and extirpate the species across 99 percent of its range from California to Kansas while leaving the indelible impression that it was the grizzly that was ferocious to meet.

- Douglas H. Chadwick (1986:6)
CHAPTER ONE

INTRODUCTION

According to their brags, my friend said, they'd just cruised along behind the wolves, with full flaps down and the throttle cut way back, aiming into a heavy wind, riding right on the pack's back—just a few feet above it, following it, and gaining on it, and sinking lower and lower, as Fatty leaned and labored out the window to get his gun into position.

'I was right there,' the dentist was saying, speaking as if in a trance. 'I tell you, Joe, it was like nothing I've ever seen or done--Joe, for a few seconds there, we were right in with them, following right behind them--and the big leader looked back, and for a minute, Joe, following along behind them like that, it was like we were one of the pack...'

But the dentist was so close to understanding, was the thing, my friend said. He had almost seen it, she said: just by the way he was talking, the awe in his voice, and his eyes—he had almost seen it.

- Rick Bass (1992:160)

Why do some humans destroy wild animals? Why do some humans not destroy wild animals? By "destroy" I mean taking a life for any reason other than basic and direct sustenance of oneself and one's family. These questions, mirror images of each other, form the basis for the body of this thesis.

The American people like wild animals (Kellert 1983): they donate money to animal protection causes, subscribe to wildlife magazines, watch informative nature programs on television, and visit zoos and national parks in ever increasing numbers. The spokesperson of our technological society—the television set—reassures us that the animals
are being looked after somewhere out there by competent and caring biologists, zookeepers, veterinarians, and other professionals.

But how many Americans are in touch with the ecological intricacy of a prairie, mountain, forest, savannah, desert, river, or even a backyard garden? Who, anymore, tills the earth? Who "gathers" to eat? Who knows if the moon is rising or setting of an evening, the feel of the changing seasons, when the grasses flower? Who has stood under a sheltering fir in a wet snowstorm with dark coming on and understood, really understood, what it must take for an animal to spend the night, and the day, and the next night, and the next day, and all the rest of one's nights and days of the winter, spring, summer, and fall outdoors? What would you eat? Where would you stay warmest? Driest? Safest?

While the people back home are being reassured via television that wild animals are abundant "out there," technology makes it easier for those in the field to destroy wildlife and its habitat with such efficient implements as vehicles, earth moving machinery, long range weaponry, etc., most of which have the added advantage of avoiding direct physical contact with the victim(s).¹

¹Sagan and Druyan put it well in stating: "Killing an enemy with teeth and bare hands is emotionally far more demanding than pulling a trigger or pressing a button. In inventing tools and weapons, in contriving civilization, we have disinhhibited the controls—sometimes thoughtlessly and inadvertently, but sometimes with cool premeditation" (1992:406).
So much for the domestic scene. Expanding our horizons we confront global development (the new name for colonialism), intra- or international strife and oppression, political systems based solely on economic justification, anthropocentric religions, and modern warfare.

Using various mathematical models, scientists have calculated the annual rate of extinction worldwide from as low as 365 species—one a day—to as high as 17,500 species. Many biologists believe the world has entered an era of upheaval more severe than the Cretaceous Period, the epoch of mass extinctions and wide ecological collapse that accompanied the disappearance of the dinosaurs (Jan DeBlieu 1991:17).[underscoring added].

There are many, too many, reasons for the victimization of the other animal species by humans. It is so overwhelming as to render one speechless. There are many deeply held cultural and religious beliefs that condone and even encourage human destruction of wild animals and their habitat. However, a basic factor, a thread that seems to be interwoven through it all, is alienation, a distancing from those animals, the absence of awareness of them, or empathy with them—an interspecific communication breakdown. This thesis is an attempt to understand that breakdown in communication.
CHAPTER TWO

INTERSPECIES COMMUNICATION DEFINED

I acquired a four-month-old Amazon parrot when the pet shop I worked for sold his colorful partner to a customer not interested in a bonded pair. For two days and nights the young Amazon called for the other bird, and would neither eat nor drink. When he went into silent withdrawal, huddling in the far corner of his cage, I decided to bring him home where there was sunlight, houseplants, and the activity of many other creatures.

Shy of humans, no doubt having been terrified during the capture-quarantine-shipment ordeals, after about two years the Amazon began often appearing proximate to one of the housecats. Always, it was the same cat, who, even more interestingly, was one of a pair of identical littermates difficult for most people to tell apart. Apparently the parrot's distrust of humans had caused him, being a member of a highly social order, to take up with the cat. Why he selected this particular animal out of a household of three dogs and five cats I don't know, but the relationship became more fascinating as time went on.

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2An appalling account of the trade in exotic parrots can be found in Jane and Michael Stern's lengthy article, Parrots, A Reporter at Large, The New Yorker, July 30, 1990:55-73, as well as most international wildlife journals.
The cat, an affectionate and laid-back tabby, paid no attention to the bird except for an occasional pained "oh no, here he comes again" look. Then he would curl tightly into the corner of the sofa as the parrot walked across the cushion toward him gurgling gentle three or four syllabic melodies that sounded like inquiries, always ending on a raised note much as the questions of human languages. Ignored, the parrot would wait patiently, about a foot away, until the cat reversed his curl to face the bird. At that point the bird would edge closer, hunker down, arching the side of his head and neck toward the cushion, and close his eyes. When one day I saw the bird topple over, I realized he had been trying to imitate the curl of the sleeping cat, and that lowering his head was preparatory to getting into correct position.

Sometimes the cat would sit up and wash himself; the parrot would commence preening. Some of the funniest scenes occurred when the parrot tried to preen the whiskers or eyebrows of the sleeping cat.

The relationship continued for several more years until, with the advent of old age, the cat acquired medical problems which indicated he would not be around much longer. Remembering the heartbreaking scene in the pet shop many years before, I soon brought home an Amazon companion for my bird. The relationship between cat and bird eventually waned; I'm not sure if it was due
exclusively to the new parrot's presence or if perhaps the advancing deterioration of the old cat contributed to it.

While imitation is often a learning experience, it is also widely practiced as a means of ingratiation. Ingratiation has, as its sole purpose, acceptance or appeasement. It is a form of communication. That the cat was fully participant in the communication is obvious; otherwise the bird would have been easily dispatched by him. Whether it was by body language, or sounds and/or states of mind communicated in a manner beyond the ken of humans, somehow the parrot knew this cat chose to participate.

Because the relationship was strikingly unusual and totally unexpected, one would be hard put to dismiss it as an anthropomorphic story. It was a clear demonstration of interspecific communication—a phenomenon often recorded by field biologists, as exemplified in Chapter 3.

There is an affinity of one animal for another, almost as though a life force recognizes itself in the other, different entity and is drawn to it out of a mixture of curiosity and good will. In the case of a hungry predator who, of necessity, must at times regard his/her immediate environment as a giant supermarket, certainly one could impute a third motive: is it edible and vulnerable? But when not hungry, apparently predators too are intrigued
by "the other."³

The significance of this affinity is that it generates perceptions which develop the ability of an organism to exist within given ecological parameters by observing and interacting with members of other species. It demonstrates the natural viability of coexistence.

Humans display that same affinity toward the other animal species as their brethren exhibit. As Donald R. Griffin, credited with establishing the field of cognitive ethology in the 1970s, points out:

We are challenged by the very difficulties of putting oneself in the skin of another animal, but we also are searching for empathy, a consideration that has not received nearly the attention it deserves. We like and admire other animals to a considerable extent because we enjoy trying to imagine what their lives are like to them. We are inclined to wonder what our pet dog wants, what the birds in our garden are feeling, or how life seems to the wide-eyed deer we

³Photographer/writer Fred Bruemmer recounts:

Long ago I did pet a polar bear, a gentle four-year-old we had caught in a steel-cable snare. We kept her captive while waiting for a radio collar to arrive. We hoped the collar would enable us to track her further wanderings.

I visited the bear every day and eventually, yielding to temptation, I cautiously fed her by hand. She could easily have snapped her powerful jaws and mauled me, but instead she took the food warily from my fingers.

Finally I touched her. She watched the approaching hand with slightly lowered head, the hair on her neck and back abristle, a sign of latent apprehension. But she did not growl or threaten. She ducked as I touched her and then remained quiet as I stroked her silky soft head. I was filled with excitement and elation—the thrill, however brief and tenuous, of a shared bond and trust (1989: ).
glimpse from a passing automobile. We feel that their ways of life must differ from ours, and similarities and differences are exciting to contemplate (1984:16).

The most powerful expressions of this human-nonhuman affinity are found throughout the world and across epochs of time in art, oral and written literature, scientific evidence, personal experience, statements by old hunters, etc. (see Chapter 5). Universal patterns of human-nonhuman animal communication take such forms as hunting rites, the mythology to develop and/or enforce social mores, shamanism, traditional healing rituals and medicinals, domestic pet keeping, and in the cognitive development of personhood:

We hardly realized ourselves that rural isolation united children and animals until the traditional boundaries of ownership blurred. Animals became our extended family. We belonged to them as much as they belonged to us, and more than one old coonhound probably regarded us as nothing more than puppies grown awkward and tall.

... Animals were also natural teachers. They mirrored life on a level Brother and I could understand. Early on, we witnessed the wonder of birth and the sorrow of death. We discovered beauty in a horse racing into the wind and perseverance in the tiny banty who heroically raised a brood of towering turkey chicks.

Gently, unconsciously, Brother and I were maturing from our contact with animals. We were being gradually drawn away from the self-centeredness of childhood. We were becoming concerned with the larger world around us, and life was rich and full (Ebler 1991:76).

People have been called out of their existence and into a experience beyond themselves or their world by wild animals. This expanding out to confront "the mysteries" goes beyond everyday needs and cannot be reduced to any
utilitarian argument. Unfortunately, English as a language, and Western society's limitations on religious thought, does not allow us to address this issue in a credible manner. (This is discussed further in Chapter 6.) However, lest one be misled into believing this confrontation of "the mysteries" is limited to indigenous cultures, George Schaller, one of the foremost field biologists in the Western world today, recounts his unexpected meeting with a snow leopard in the wintry Hindu Kush of Pakistan:

Then I saw the snow leopard, a hundred and fifty feet away, peering at me from the spur, her body so well molded into the contours of the boulders that she seemed a part of them. Her smoky-gray coat sprinkled with black rosettes perfectly complemented the rocks and snowy wastes, and her pale eyes conveyed an image of immense solitude. As we watched each other the clouds descended once more, entombing us and bringing more snow. Perhaps sensing that I meant her no harm, she sat up. Though snow soon capped her head and shoulders, she remained, silent and still, seemingly impervious to the elements. Wisps of clouds swirled around, transforming her into a ghost creature, part myth and part reality. Balanced precariously on a ledge and bitterly cold, I too stayed, unwilling to disrupt the moment. One often has empathy with animals, but rarely and unexpectedly one attains a state beyond the subjective and fleetingly almost seems to become what one beholds; here, in this snowbound valley of the Hindu Kush, I briefly achieved such intimacy. Then the snow fell more thickly, and, dreamlike, the cat slipped away as if she had never been (1980:8).

In another incident, one to which most of us can perhaps more readily relate, yet also involving that mysterious interface between human and nonhuman animals, a deeply comatose patient only began to respond when
his dog was brought, hidden in a bag, to the hospital.  

That this affinity between species would quite naturally evolve varying degrees of communication should not surprise us. Rather, it would be amazing had it not done so. To better understand what is meant by "communication" in the sense in which it is used in this discussion, The Oxford Companion to Animal Behavior (1987) gives the following definition:

An animal is said to have communicated with another animal when it can be shown to have influenced its behavior (79).

Or, more precisely:

Animal A is said to have communicated with [Animal] B when A's behavior manipulates B's sense organs in such a way that B's behavior is changed.

The definition does not demand that the response of the recipient of a signal should be immediate (79).

The Oxford Companion, in discussing communication, goes on to explain:

Even though the benefits may not be evenly shared by the two participants, it may still be the case that the balance of selective forces acting on both sender and receiver is pushing in the same direction, i.e. towards the evolution of an efficient mutual signalling system (80).

Many linguists and philosophers once held that language provided the logical structure for thinking, that an idea was more or less a mental sentence. Therefore, they concluded, since animals are mute, they must be mindless as well. Animal signals such as calls and displays

4"Dr. McCarthy Speaks on Human-Animal Bond," Hi-Tor Newsletter (Hi-Tor Animal Care Center, Inc., Pomona, New York), 1991, pp. unnumbered.
were considered "reflex expressions of raw emotion" (Byrne 1991:44). However by the late 1970s communication studies such as those of Dorothy Cheney and Robert Seyfarth (which culminated in the fascinating book *How Monkeys See the World*, published by the University of Chicago Press) established that animal calls do indeed carry specific information, much as human language does, and, as Byrne puts it:

> [t]he great divide posited by linguists and philosophers was narrowing. The differences between animal communication and human language, it seemed, had been overstated (1991:45).

In his study of vertebrate communication, C. G. Beer argued that:

> a great deal depends upon the investigator's starting stance and preconceptions; that due allowance should be made for the diversity in the types and uses of communication in vertebrates; that while some systems appear to be so different from the human as to be beyond our empathetic apprehension, others appear to involve knowledge, intention, and aesthetic dimension within our ken. By and large the more an animal mind seems continuous with the human mind, the closer the animal to human phylogenetically, and in the texture of its social life (1982:265).

Beer also reminds us of:

> things like blushing, eyebrow-flashing, tongue-showing, which we do most of the time unconsciously, which are not learned in the way our more consciously commanded communication is, yet which betray emotion, behavioral tendency, or situation (1982:260).

Writing of animal communication, Julia C. Berryman (1982) explores five main types: acoustic, visual, tactile, chemical (secretions), and electric (electric organs and/or receptors in aquatic species). Thus, we handicap ourselves if we believe that paucity of language or acoustics denotes lack of communication.
An amusing, but to the point, example of this is given by Carl Sagan and Ann Druyan:

One wolf will greet another by placing its mouth around the other's muzzle. Many other mammals do likewise. Those taming wild animals may be startled when they are at the receiving end of such a greeting. The wolf stands on its hind legs, places its forelegs on the scientist's shoulders, and places its jaws around the scientist's head. This is just the wolf's way of being friendly. If you're an animal who doesn't know how to talk, a very clear signal is communicated: 'See my teeth? Feel them? I could hurt you. I really could. But I won't. I like you' (1992:192).

Donald Griffin sums up the current status of the study of human participation in interspecies communication:

In one sense animals may already be using the window [of communication], as they succeed in conveying to one another their feelings and simple thoughts. If other animals can get these messages, cognitive ethologists with the advantage of the human brain should be able to do as well (1984:210).

In a Readers Digest article, Bil Gilbert revealed an incredible degree of communication between man and dog:

Dain and I have been good companions, a good example of what is possible between man and dog. Part of our mutual vocabulary is traditional: sit, stay, come, heel, get it, no; wagging tail, head in the lap, whine at the door, a variety of yips and barks. As he prowls outside, there is a particular barking response to a stranger passing by on the road, to a stranger entering the lane, for people he knows, for those in cars and those on foot. There are certain barks for dogs, for cats and for creatures that are not people, dogs or cats. ....

From a variety of signs, I know when Dain is excited, alarmed, content, fatigued, confused.
But he knows all of this about me and more. He recognizes and responds to shades of my anger, joy, uncertainty, fear, triumph, pain, illness, elation, impatience, boredom, satisfaction.

As the years have passed, there have been times when Dain, by his behavior, has shown me how I felt. I might not know how high or low, elated or ornery I was feeling until I happened to catch the manner and mood of the dog.

Love, someone said, is the desire for knowledge of another. By this definition, claims that dogs love men are not so maudlin as they sometimes seem. This old red dog knows me in ways and to degrees no other living thing ever has or probably ever will (1975:98).

One of the most moving accounts of human-nonhuman communication was told to me by a close friend who, having picked up a hit-run cat, was rushing it to the nearest veterinarian. In the obvious extremity of its condition, in a pathetic attempt at ingratiating the little feline purred at my friend from the passenger seat of her car, onto the veterinarian's table, and didn't stop until the vet mercifully ended her life. I have read similar accounts from the 1800s involving cats strapped to the vivisectionist's table.

In her discussion of the controversy over language learning in nonhuman primates, Berryman summarizes that while apes:

- do not appear to have learned human language,
- they have learned many signs which they use in non-random ways in communicating with man. 

... researchers ... have been rewarded by man-chimp cooperation to the extent that chimps used these learned signals to communicate with their trainers. ... it appears that the
only messages passed between chimps are messages which they can already send effectively with their own species-characteristic signals (1982:78) [underscoring added].

This would indicate determination on the part of the chimps to communicate with the human members of their "community." Sadly, the following anecdote reflects prevalent contemporary human capabilities as respondents to interspecies communication.

In one case, the colony where apes had been taught Ameslan [American Sign Language] had fallen on hard times. Years had passed. Support was drying up. No one seemed interested in conversing with the chimps anymore. The grounds had become weedy and overgrown. The inmates were about to be shipped to laboratories for medical experimentation. Before the end, the chimps were visited by two people who had known them in the old days. "What do you want?" the visitors asked in Ameslan. "Key," the two chimps are said to have signed back from behind bars, one after the other. "Key." They wanted out. They wanted to escape. Their request was not granted (Sagan and Druyan, 1992b:85).
CHAPTER THREE

COMMUNICATION PROMOTES COEXISTENCE

Interactions between living beings involve communication as a means of establishing coexistence including survival of the individual. We may define coexistence as the ability "to exist together or at the same time" (Random House Dictionary of the English Language. New York: Random House, Inc., 1966). However, since every animal will interact with many other animals in the course of its lifetime, the above definition cannot be read to exclude episodes that may either benefit or cost the animal such as competition (discussed on the following pages), mild parasitism, commensalism (one participant benefits, while the other remains unaffected), or mutualism. If we move from the level of individual to that of species, even predation may be considered episodic to the coexistence of the species involved: it may even establish a relationship that approaches mutualism (the species that is fed provides

5A clear example with which we can all identify:

- Nations at peace have an ongoing dialog—multiple diplomats and consultants discussing economic strategy, trade arrangements, pooling scientific et al. knowledge, etc.

- Nations at war withdraw diplomats, sever all ties, issue trade embargos, and in place of direct dialog are prone to misreading each other's intentions, as witness the pervasive fear in recent years of someone's "pushing the wrong button."

Simply consider the stated purpose of the United Nations as a forum for communication.
the impetus for the physical fitness of the other, etc.\textsuperscript{6}

As we have seen in Chapter 2, communication between species enriches the participants' understanding of, and therefore viability in, their immediate community or environment. The traditional view of animal communication is that signals evolved to facilitate cooperation between organisms, which in turn benefits each participant in terms of survival.\textsuperscript{7} Thus, as Berryman explains:

\begin{quote}
...signals used even in highly competitive contexts, for example in aggression, dominance, and territoriality, have their basis in a system that is ultimately thought to have evolved for the benefit of all the users of that system within a species. On this basis it could be argued that signals of threat, or appeasement and submission, are used because they enable animals to resolve their conflicts without having to resort to physical combat, and thus both participants benefit by using a common set of signals which prevent (or reduce the chances of) either being hurt \textsuperscript{(1982:79)}.
\end{quote}

This frequently holds true for participants of different species as well.


\textsuperscript{7} Interestingly, Berryman also tells us that:
Dawkins and Krebs (1978) explained the same sort of behaviour in rather different terms. These authors suggested that natural selection favours individuals who manipulate the behaviour of other individuals—whether or not those other individuals benefit. On this basis animal communication is not seen as cooperative, although elements of it may appear to have incidental beneficial effects on conspecifics \textsuperscript{(1982:79)}.

Although this "selfish-gene" approach may biologically explain the overly-dominant status of humans, I find it problematic as a viable pattern in nature in that loss of diversity invites natural catastrophe.
In addition, communication which enables coexistence would certainly conserve energy, a factor of major significance in community dynamics.

Along these lines, Axelrod (1984) gives four common occurrences in daily life which in the absence of relatedness of genes, a factor widely acknowledged as accountable for much intraspecific cooperation, would propel an organism toward cooperation with another: (1) recognition of the other individual; (2) a fixed or regular place of meeting; (3) a high probability of meeting again (frequent interactions promote stable relationships); and (4) the chance for reciprocity. Axelrod states:

...when the probability of two individuals meeting each other again is sufficiently high, cooperation based on reciprocity can thrive and be evolutionarily stable in a population with no relatedness at all (1984:97).

A fascinating account of this development of coexistence strategies is given by Elizabeth Marshall Thomas, a member of the Marshall family of anthropologists whose studies of the Bushmen of the Kalahari span more than 30 years, in describing two encounters involving the same group of lions:

The rhino was a rather belligerent female, who, with her large child at her heels, often came to drink soon after dark. One moonlit night when the lions were relaxing in the open near the runoff, the rhino seemed to take exception to their presence and charged. The lions seemed hardly to notice. To my amazement, they did nothing at all until the rhino was almost on top of them, and then, very casually, they got to their feet and, with unbelievable aplomb, moved gracefully toward her, stepping aside
at the very last moment to let her charge through. As soon as she was among them, they seemed to flow around her like water around the prow of a boat, to reassemble behind her armored rump. Seeming not to know what had happened, she cantered on for a while before she saw that no one was there. The lions barely glanced at her, as if they had hardly as much as a passing thought for her. They looked, in fact, as if they already knew about this rhino, as if they had developed their coordinated, dancelike tactic just to avoid her and had practiced with her many times before.

In contrast was the encounter between the lions and an elephant. One evening soon after the lions had been charged by the rhino, they were lying in the same place, a pile of tan bodies behind a fallen log, which hid them from the plain. I was watching some of them peer over the log at a zebra who was considering drinking from the runoff when I saw them stiffen, then get up and move apart. Far away, elephants had appeared at the edge of the trees. It seemed to me that the lions recognized these particular elephants. A big adolescent male elephant, about sixteen or seventeen years old, left the others and strode toward the lions with his head high, his ears wide, his tail and trunk up. Although he was at least fifty yards from them, the uneasy lions were watching him intently. For just a moment, the maned lion stood his ground: with his legs braced and his head high, he gave a roar. The elephant answered with a roar of his own. The lion roared once more, which brought the elephant onward at a fast walk. This was more than enough for the lions. Without a sound, they turned tail, scattered like a flock of sparrows, and vanished (1990:104).

In each case the method of avoiding conflict was based on expectations communicated in previous and/or repeated encounters. This supports Berryman's argument that even signals of threat may be incorporated within a common set of signals, i.e. communication, which deters physical combat, i.e. promotes cooperative behavior.
With this in mind I must refute claims such as those of John Lazarus (1982) who states:

> Competition is at the heart of the evolutionary process. Whenever animals have access to the same resource the potential for competition exists and those more successful in the competition are the ones favoured by natural selection (1982:26).

Where Mr. Lazarus uses the word "competition," I would substitute "cooperation." ⁸

In 1909 Petr Kropotkin wrote:

> Of the scientific followers of Darwin, the first, as far as I know, who understood the full purport of Mutual Aid as a law of Nature and the chief factor of evolution, was a well-known Russian zoologist, the late Dean of the St. Petersburg University, Professor Kessler. ... 'As a zoologist of old standing,' he felt bound to protest against the abuse of a term—the struggle for existence—borrowed from zoology, .... Zoology, he said, and those sciences which deal with man, continually insist upon what they call the pitiless law of struggle for existence. But they forget the existence of another law which may be described as the law of mutual aid, which law, at least for the animals, is far more essential than the former (1909:6).

Kropotkin was so impressed with the truth of Kessler's remarks that he subsequently wrote and published his famous treatise, Mutual Aid: A Factor of Evolution, in which he staunchly defends cooperation between organisms, rather than competition, as being the vehicle for natural

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⁸ Cooperation: (Ecol.) mutually beneficial interaction among organisms living in a limited area.

Competition: (Ecol.) the struggle [violent effort against opposing force] among organisms, both of the same and of different species, for food, space, and other requirements for existence [underscoring added].

selection of the fittest for survival. Kropotkin's book is well known. Less well known is what he tells us of the reaction of those researchers present in January 1880 to Professor Kessler's ideas:

The correctness of the above views struck most of the Russian zoologists present, .... [Their] readiness ... to accept Kessler's views seems quite natural, because nearly all of them have had opportunities of studying the animal world in the wide uninhabited regions of Northern Asia and East Russia; and it is impossible to study like regions without being brought to the same ideas. I recollect myself the impression produced upon me by the animal world of Siberia when I explored the Vitim regions in the company of so accomplished a zoologist as my friend Polyakoff was. We both were under the fresh impression of the Origin of Species, but we vainly looked for the keen competition between animals of the same species which the reading of Darwin's work had prepared us to expect, even after taking into account the remarks of the third chapter [wherein Darwin issues a caveat against interpreting his use of the phrase "struggle for existence" as other than metaphorical] .... We saw plenty of adaptations for struggling, very often in common, against the adverse circumstances of climate, or against various enemies, and Polyakoff wrote many a good page upon the mutual dependency of carnivores, ruminants, and rodents in their geographical distribution; we witnessed numbers of facts of mutual support, especially during the migrations of birds and ruminants; but even in the Amur and Usuri regions, where animal life swarms in abundance, facts of real competition and struggle between higher animals of the same species came very seldom under my notice, though I eagerly searched for them. The same impression appears in the works of most Russian zoologists, and it probably explains why Kessler's ideas were so welcomed by the Russian Darwinists, whilst like ideas are not in vogue amidst the followers of Darwin in Western Europe [underscoring added] (1909:8).

I find it interesting to speculate as to why Western European scientists, who at the turn of the century were
still much enamoured with Descartes' concepts of nonhuman animals as machines with negligible capacity for thought or feelings, would as tenaciously cling to the concept of those same animals as fiercely competing with each other in a struggle for survival. Might it have had something to do with the rapidly accelerating human expropriation of habitat and resources in that part of the world experiencing the dawn of a free market economy with its subsequent oppression and extermination of the other animal species?

In a similar vein, we are often told that the human species evolved language primarily to become more effective hunters and killers of other animals. Again, the focus is on the appropriateness of conflict as a tool for survival. In a refreshing antidote to this attitude, Ashley Montague writes:

Of all the evidence we have of the supremacy of cooperativeness in the development of human beings, speech is surely the most convincing. Speech is by nature a cooperative venture; it is designed to put one into touch with others; without someone to talk to, talking is meaningless. Without someone to answer, talking is profitless. Talking presupposes at least two persons who are on good enough terms not to interrupt the conversation with violence or hostility. Conversely, the development of speech argues strongly for an awareness on the part of early humans for this tool to make cooperation more effective. Had they been basically hostile creatures, they would not have wanted speech, or needed it, or developed it (1976:162).

Why "survival of the fittest" is still interpreted in Western thought in terms of competitive conflict rather than cooperation will be suggested by Chapter 6 of this thesis.
Mutualism, the cooperation of one organism with another to the benefit of both, has been given much less attention by field biologists than that focussed on more aggressive interspecific interactions. We see what we expect to see, and until recently human observers of animal behavior, the overwhelming majority of whom have been male, have reported a great deal of conflict in the animal kingdom and not very much cooperative interspecific behavior. Yet the necessity for cooperative or communal behavioral patterns between organisms is obvious. It permits coexistence and the ability to function in an essentially hospitable environment—in other words, a positive medium for the living organism. Accounts of the successful use of communication in establishing cooperation between members of different species for mutual benefit are available.

The Missoulian (November 29, 1991) reported a 22-year-old mare, who had been retired out to pasture, where she was:

...immediately adopted as mother by a young antelope fawn that wandered into her pasture several days ago.

...'The little antelope follows Hollie around wherever Hollie goes, and Hollie nuzzles it and treats it just like her baby. ... [she] has always been an excellent mother,' [the owner] added.

Neighbors noticed Hollie had a visitor, and speculated the young antelope fawn lost its mother, probably to hunters, and also been abandoned by its herd.

'There evidently is a bond between them,' said [the owner]. 'The old mare is treating the antelope just like a foal, and the antelope has really taken to Hollie.'
McFarland, et al. (1987) gives several examples of symbiotic relationships characterized by "signals" between participants of different species, for example:

The honey-badger (*Mellivora capensis*) lives in symbiosis with a small bird called the black-throated honey guide (*Indicator indicator*). When the bird discovers a hive of wild bees, it searches for a badger and guides it to the hive by means of a special display. The badger opens the hive with its large claws, being protected from the bees by its thick skin. It then feeds upon the honeycombs, while the bird gains access to the bee larvae and wax, which it could not have done unaided. If the honey guide cannot find a badger, it transfers its attention to the next best alternative, which often happens to be man. In accordance with old tradition, the natives understand the bird's behaviour, and are able to follow it to the hive. It is an unwritten law that the bird is allowed to take the bee larvae. Thus the symbiotic relationship is transferred from badger to man (1987:319).

And in an even more fascinating example:

...the cleaner wrasse (*Labroides dimidiatus*) lives off parasites that infest the bodies of larger fish species. It entices a host to permit itself to be cleaned by means of a special form of swimming, the cleaner dance. It butts its snout against the fins and gill covers to signal to the host to spread them so that they can be cleaned. Similarly, it induces the host to open its mouth, so that it can enter and take parasites from the mouth cavity. While the cleaner fish is going about its work it continually vibrates its ventral fins, so that they tap against the host's body. Thus the host knows where it is being cleaned, and reacts by holding that part immobile. Host fish generally signal to the cleaner fish when they are about to move. They invite the cleaners to enter their mouth by opening it wide, and signal them to leave by jerking the mouth half shut and then opening it again. The cleaner leaves the mouth following this signal. Many different species of fish allow themselves to be cleaned in this way, and they
all behave in the same manner when being attended to. Some cleaner fish take up a station at a particular place, and their host fish congregate and wait to be serviced. There are many species of cleaner fish, and they generally have similar distinct stripy markings, which act as sign stimuli and facilitate recognition by large host fish, which might otherwise eat them (McFarland 1987:319).

Humans and members of other species with which they coexist have historically both benefitted from sharing an awareness and understanding of each other. Communication between the Algonquian hunter-gatherers of Eastern Canada and the wild animals with which they shared their habitat was amicably arbitrated with "keepers of the game," or the spirits of the game (Martin 1978:18). When ritually propitiated with gratitude and respect for the lives of the hunted animals, as well as the use of ecologically sound traditions for conducting the hunt, these spirits would allow one of its charges to "give" itself to the hunters. Thus, both man and animal benefitted from a mutually nonexploitive mode of interaction.

Today, reintroduction specialists understand that as regards the human members of the community where an endangered species is to be located:

...education about the reintroduction is important to ensure continuity and the long-term support, protection, and management of the species and its habitat.

.... Early in a reintroduction effort, the organizers need to involve the local community such that they become collaborators in ... the program (Kleiman 1989:158).
Mallinson (1991) found that:

The orchestration of strategies concerned with the conservation of particular species, culminating in reintroduction, has the unique capacity to inspire people and to foster a sympathetic attitude towards the needs of other threatened species, and towards related environmental issues (1991:67).

The mechanism for successful reintroductions appears to be the engendering of empathic awareness on the part of local residents of the endangered animals. As we have seen in Chapter 2, that awareness sets the stage for interspecies communication resulting in mutual understanding of what the other needs, wants, or expects from us. Thomas recounts the coexistence strategies surrounding one of the few permanent waterholes in the Kalahari Desert in the 1950s when it was still remote and few people other than the Bushmen had even passed through it:

So in an area of a few square miles lived about thirty people, ten or more lions, a cheetah, a leopard, and at least five hyenas, or approximately fifty large, predatory creatures, all of them hunting the same antelope population, all of them drinking from the same waterhole.

Helping to minimize the chance of meeting was the habit of the different groups to use the area and its resources at different times--the people and the cheetah by day and the other predators by night. Time of day was particularly important for the people and the lions, because the people needed daylight for hunting and also for gathering, and the lions, who couldn't hope to hunt if they couldn't conceal their large bodies, preferred darkness; the grass was seldom long enough or thick enough to hide them.

As one group spread out to forage, the other group would gather together to sleep. Further limiting the chance of meeting was that neither group started the day's or the night's activity
quickly. Each group delayed: the lions began their hunting not at dusk, when the people might still be on their way home, but long after dark; the people, on the other hand, delayed leaving their camp until the day was well along, and thus never met the lions—or, for that matter, any nocturnal predator who might be finishing a night's hunt in the dawn (1990:86).

By contrast, in the increasingly fashionable Rattlesnake suburb of Missoula, Montana in 1990, a black bear sow and her yearling cub were tranquilized while asleep 60 feet up a tree by a State game warden, police, and fire department personnel, with the resultant death of the sow (and probable death of the cub released alone into the wild, since black bears don’t usually leave their mothers until three or four years of age). Officials took the action following repeated complaints of the bears' presence, which prompted the game warden to say:

The only reason people have problems with bears is the food source [garbage]. Every year we have more and more acres of developed land around town. Everybody says they want to move back to nature. Until nature walks through their yard (Devlin, 1990:--).

Unfortunately, incidents like this one happen all the time. The irony of the situation is captured well in the writings of Theresa Corrigan:

... in encounters with humans, animals rarely have real choices. When an animal indicates her choice not to interact, her behavior is interpreted as hostile or as a challenge to conquer. If a human fails to properly interpret the animal's message and gets hurt, it is the animal who is punished or even killed. We do not perceive it as an intrusion for a human
to invade an animal's personal space: as women for men, other animals are always expected to be accessible to humans (1990:201).

How do people get to be so removed from communication with the other animal species? One way is by being unaware that their perceptions are culturally conditioned; another is by ignoring/denying the fact that nonhuman animals are as aware of humans as humans are of them.
Sweet William

"Death has no power over the feeling of Sweet William's breath on my fingers."--Pat Derby, who saved William from being executed.

Black bear
over the hill nose
scarred pads
rag tag rump,
you are my totem.

Sing to me the howl of resistance.
Dream to me the forests of your heart.

Like the dragon
slain to make men
larger than life,
you met your saint george--
in the circus.
Armed with whip and chains,
he fought to claim your spirit,
four times broke your nose.
Like Stepin' Fetchit
you danced the Fool
on fire scarred pads
till rage burned murder into your eyes.

Now your cloudy eyes
mirror prisms of lost souls,
death marches,
slaveships,
burnt offerings
to ancient gods.
Your deep throaty rumblings
call up the keening
of war land mothers.

Descendant of your primordial enemy
I would expect vengeance from you.
Instead you make my heart soar
with your gentle nudging.

Sweet William,
I too can be of stout heart
and steady gaze
when enemies threaten to plant
seeds of bitterness in my soul.
I too can keep dreams of wildness
alive in my spirit
when those who would chain me
capture my devotion.
I too can claim my animal forgiveness when fury devours my soft underbelly. I must only remember the first time you kissed me, sliding your smooth ragged tongue along the side my face.

William, sing to me the howl of resistance. Dream to me the forests of your heart.

(Theresa Corrigan, 1990:186)
CHAPTER FOUR
EXPLORING THE RELATIONSHIP BETWEEN
PERCEPTIONS AND ATTITUDES

There is a silence needed here before a person enters the bordered world the birds inhabit, so we stop and compose ourselves before entering their doors, and we listen to the musical calls of the eagles, the sound of wings in air, the way their sharp-clawed feet, many larger than our own hands, grab hold of a perch. Then we know they are ready for us to enter.

.... A friend, awed at the thought of working with eagles, said, 'Imagine knowing an eagle.' I answered her honestly, 'It isn't so much that we know the eagles. It's that they know us.'

- Linda Hogan (1990:183)

In the examples of interspecies communication and cooperation given in Chapters 2 and 3, it's clear that each participant in the interaction must be acting out of an informed awareness of the other. Prior perceptual experience plays an important role in attaining that awareness. Interspecific awareness, or knowledge of the other, as between human and nonhuman animals, is a two-way adaptive process, that is to say, human awareness of the other species as well as other-species awareness of humans. A mutual understanding can develop that enables each to some extent to "read the mind" of the other.

All animals, human as well as nonhuman, form perceptions that are the underlying motivation for a wide range of possible behaviors. Perception should not be equated with sight; it subsumes sight as well as taste, touch,
smell, sound, etc. To clarify the following discussion,

The Oxford Companion to Animal Behavior (1987) states:

Perception, the appreciation of the world through the senses, depends upon the sense organs possessed by the animal, and the interpretation that is placed upon the incoming sensations by the brain (449).

In Animal Thought (1983) Stephen Walker explains:

More generally, the function of perception is to direct actions, and actions may need to be determined not only by present sensations but also by prior perceptual experience and inferences based on it (286).

He differentiates between:

... the sensing of stimulation which takes place in the organised movements of swallowing, the unconscious co-ordination of particular muscles in walking or standing, or the accommodation of the lens of the eye to objects at different distances, and, on the other hand, such things as the perceptual experience of recognising another person in a photograph or noticing that traffic lights have turned from red to green.

... but the main thing is that there is a cognitive aspect of perception and this is quite different from reflexive reactions to stimulation such as the contraction of the pupil in response to bright lights or a jerk of the arm when the finger touches a burning-hot plate (240).

Expressing the cognitive aspect of perception in nonhuman animals is the familiar example of a dog retrieving a thrown stick. It would serve little purpose if the dog ran to where the stick was located when first seen, which it would do if nonhuman perception were a purely reflexive phenomenon. In much the same way, a predator needs to arrive at the cognitively inferred site of
intersection between itself and identified\(^9\) moving prey.

As Walker (1983) concludes:

> The instigation of action which corresponds to the initial perception demonstrates that a description or schema of the perceptual input is retained, and that it is retained in such a form that it can be translated into appropriate movements (285).

He refers to memory as sustained and revived perceptions.

> Over time, perceptions are subject to change due to the steady input of new experiences and/or changes in attitude effected by social and/or cultural influences. Again, this pertains to both human and nonhuman individuals.

Merriam Webster Pocket Dictionary (1966) helpfully distinguishes between perceptions and attitudes as follows:

- **percept:** a sense impression of an object accompanied by an understanding of what it is.

- **attitude:** (2) a mental position or feeling with regard to an object (3) the position of something in relation to something else.

Roget's Thesaurus (1967) defines attitude as synonymous with "posture," "pose" under the category of FORM; whereas perception is synonymous with "impression" or "intuition," "consciousness" under the categories of IDEA and KNOWLEDGE, respectively. This is not to belabor the issue, but to point out that one term (attitude) may be thought of as a structure, and the other (perception) as an impression.

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\(^9\) The identification of the object as a prey species is in itself another "proof" of the cognitive aspect of all animal perception.
As regards the definition of perception given on page 32, attitude may be considered key to the "interpretation that is placed upon the incoming sensations by the brain." A vivid example comes to mind from my childhood. A favorite Halloween game played in the dark was a tale of "dismemberment" accompanied by the passing around of "body parts," e.g. spaghetti as intestines, jello as brains, a water-filled balloon as organs, stuffed olives as eyeballs, etc. I can still recall my squeamishness at being handed these objects even having witnessed their earlier preparation in the kitchen. Some of our guests would not touch them at all, and the game usually aborted midway by insistence that the lights be turned on!

Since, as we have seen previously, perceptions direct actions, it is evident how the perceptions, attitudes, and behavior of any animal are interlinked.

One other piece of information I would like to offer at this point is the theory put forth by Jeffrey A. Gray (1984) that the hippocampal formation of the brain and the Papez circuit to which the hippocampus is very closely related, functions as an interface between cognitive and emotional processes. According to Gray, the hippocampal formation had figured prominently in both cognitive theories and theories of emotions since 1937. He sees the results of his research, a neuropsychological study of induced anxiety in mice, as an integration of these two traditions (607). Gray states:
The ... distinction which has been blurred (but not lost, or the notion of interface would not be appropriate) is that between thought and emotion. This is surely as it should be. We do not stop thinking when we are emotionally aroused, nor use different machinery with which to think. Nor do we only think at such times: we also act (or interrupt action) and feel. A successful theory will need, therefore, in this as in any other branch of psychology, to bind thought, action and emotion into a single whole (624).

So, to complete our understanding of how perceptions are registered within the individual, we must, not surprisingly, include emotions as influential in the aforementioned "interpretation that is placed upon the incoming sensations by the brain," or, in other words, in the formation of inferences. This underscores the important role emotions or feelings play in appropriate cognitive functioning and therefore in determining the path of action an organism will devise. It also inadvertently exposes the fallacy of what Western civilization terms "objective thinking."

Interpretations of emotions emerge from the dynamics of social interaction. An individual constructs or interprets the meanings of emotions, and in turn these meanings shape emotional experience and expression (Gordon 1989).

Society pervades this process of constructing meaning. .... Emotions are regulated by social norms that prescribe the conventionally appropriate quality, intensity, duration, and target for emotions in particular situations and relationships (S. L. Gordon 1989:320).

C. Saarni (1989) argues that an individual's emotional
experience is inseparable from socio-cultural meaning:

The mechanisms for this influence may be (a) direct socialization, that is, reinforcement contingencies, (b) of an indirect sort, that is, observing and/or incorporating the experience of others, or (c) according to expectations communicated by others to the [individual], which are subsequently internalized in the self as personal expectancies (186).

The foregoing discussion of the dynamics of emotional development has obviously been enabled by the fact of shared communication, in large part but not limited to shared verbal language, between psychologists and their

A man was standing in a long, deserted street waiting for a bus to take him to work. He was the only living creature between the gray walls of the houses, with the exception of a Saint Bernard dog, who seemed equally lonely. After some time the dog walked up to the man and, rubbing his head against his legs, offered his affection and companionship. The man was touched by his friendliness and scratched his silky coat in response. When he boarded the bus the dog followed his new master automatically. Both received a warm welcome among the passengers, who, traveling together each morning to work, found the presence of this dog a welcome change. They made a great fuss over him, to which he responded by placing his big head on their knees, but, as is the habit of a Saint Bernard, he left traces of saliva on their clothes. This soon provoked complaints and finally protests, and the man was asked to take the dog away. Although he had certainly felt proud when earlier much attention had been paid to him because of the dog, he now pushed him off the bus into the street. By then the drizzling rain had turned to snow that continued to fall all day long. In the late afternoon when the man was returning home, he passed the spot where he had pushed the dog off the bus. There he saw a mound covered with freshly fallen snow (Joy Adamson 1978:6).
human subjects. Why, then, should contemplation of the phenomena of perceptions and attitudes be inclusive of all animal species? I choose to share Donald Griffin's (1984) position that in the interests of parsimony (the least contorted explanation) it is appropriate to accept those indicators of mind in nonhuman animals as indicative of general cognitive and emotional abilities albeit perhaps not as extensively developed as those of humans. This makes more sense than inventing farfetched and circuitous physical explanations for every least dynamic of the other forms of life, not to mention subjecting the latter to the experimenter's whim. As J. Coy (1989) in discussing factors favorable to the biological evolution of self-awareness points out:

The very subtlety of our own appreciation of what may be going on in another mind suggests a long and important history for this behavior (79).

What has all this to do with loss of the human capacity for interspecies communication? There can be no proper communication between two individuals, one of whom regards the other as object. Nor can there be coexistence, but only oppression:

- Humans—who enslave, castrate, experiment on, and fillet other animals—have had an understandable penchant for pretending that animals do not feel pain. .... Darwin was haunted by this issue:
  ... every one has heard of the dog suffering under vivisection, who licked the hand of the operator;
this man, unless the operation was fully justified by an increase of our knowledge, or unless he had a heart of stone, must have felt remorse to the last hour of his life (Charles Darwin, Chapter III, The Descent of Man, 1871, as quoted by Sagan and Druyan 1992:371).

- Hearings on the Long-Mathias bill to end the use of the leghold trap (H.R. 1797) were held in Washington, D.C. on August 3rd [1984].

... To counter [the graphic] testimony [of supporters of the ban], one trapping advocate told the committee that he did not and would not believe animals experience pain unless some animal described the sensation 'in our language' (ASPCA Report (Fall/Winter 1984): 1).

- "Animal rights people are putting all kinds of crap out on bow hunting with no kind of research at all," Samuel said.

They are a minority who fail to mention that wild animals are alive only because humans, specifically hunters, have a need for them, Samuel said ("Bowhunter Loves Quiet, Careful Pursuit of Deer," Missoulian, October 10, 1991, p. C-10).

- The wind blew with a violence such as I had never before experienced, the air was filled with drifting snow, and the temperature was in the neighborhood of zero.

About break of dawn I was awakened by my servant, who said to me: "Lieutenant, the wind blew your back gate open last night, and a buffalo has come in and taken refuge under the shelter of the fence."

It was only necessary for me to raise myself in bed and look out of the window, which was at its foot, to verify this fact. I directed that my gun and a few cartridges should be brought me, and while my servant held up the window, I still lying in bed, gave this solitary old bull a broadside at fifty yards range. At the salutation, he started out through the gate, and before I could reload, was out of sight behind the fence, so I rolled over to resume my morning's nap.

Two or three hours later, word was brought me that I had killed the buffalo, and that his body was lying about two hundred yards
back on the plain. I went out to him and took his tongue as my reward (George S. Anderson 1893:24).

'The cats [mountain lions, Bengal tigers, and spotted leopards believed to have been retired from zoos] were brought into the ranch and taken to the hunters,' said special agent Bill Talkin of the U.S. Fish and Wildlife Service. "Then the cage was opened and the cats were supposed to escape. They were never more than 100 feet away from the cage when they were shot.'

But some of the animals, accustomed to being dependent on humans, refused to exit their cages, he said, and were shot execution-style while still confined. Hunters [who paid thousands of dollars for the privilege] then dragged the carcasses out of the steel enclosure and had their pictures taken next to the dead 'trophy,' investigators said ("Retired Zoo Cats Shot for Profit," Missoulian, April 25, 1991, p.-).

There is a fundamental emotional/cognitive (apropos of Gray, p. 37 of this chapter) difference in the perceptions of and attitudes toward wild animals of modern "civilized" societies and their predecessors, the animistic or totemic societies which survive today only as marginalized peoples. There is as well a strikingly parallel difference in the perceptions and attitudes of androcentric\textsuperscript{11} societies as compared with those of or approaching equalitarian or partnership status between men and women. Each of these fundamental differences in turn, as well as the relationship between them, will be examined in the following two chapters.

\textsuperscript{11} Androcentric: dominated by males or by masculine interests (Random House Dictionary of the English Language, 1966)
Jaguars are shamans, too, they say. You can see magic burning in their eyes. Jaguar was the one who gave the Kayapo fire, which is one reason they do not hunt the sacred cat. If one is killed—for example, in self-defense—it is accorded the same funeral dance a dead person would receive.

The Kayapo [of the Brazilian Amazon] share the universal myth that in some long ago time man was able to speak to all other living things. Nowadays, only shamans still have that ability.


Based on the evidence available to us today, it would appear that the human species has long looked upon wild animal species as the preeminent emissaries or tangible manifestations of "Nature," or the natural world exclusive of humans. No doubt in the memory of our species there also lingers the evolutionary moment of separation, and early woman and man must have carried with them thoughts of the "others" as our sisters and brothers. Indeed today that is still the name by which wild animals are called by indigenous peoples.

There appears to be an historic correlation across most human cultures of origin mythologies relating an early "dream time" of human-nonhuman transformation or metamorphosis and free-flowing conversation.¹² Paleolithic

¹² Magic Words
(Eskimo)
In the very earliest time, when both people and animals lived on earth, a person could become an animal if he wanted to
cavern paintings of southwestern Europe dating back to 17,000 B.C. (Campbell 1988(1):65); the tombs and hieroglyphs of ancient Egypt, considered the first great civilization, dating back to 3,000 B.C. (Breasted 1935:120); and contemporary literature and art, and not solely that of indigenous cultures, all portray humans—gods, goddesses, or mortals—as half human, half "animal." This is seen so frequently and so commonly that it is taken for granted and never given much thought. Perhaps because most of us were raised with half human, half "animal" fables, fairy tales, songs, games, or videoproductions.

The oldest literary masterpiece known today is the ancient legend of Gilgamesh, a Sumerian king of about 3,000 B.C., who cannot accept the death of his "twin,"

and an animal could become a human being.
Sometimes they were people
and sometimes animals
and there was no difference.
All spoke the same language.
That was the time when words were like magic.
The human mind had mysterious powers.
A word spoken by chance
might have strange consequences.
It would suddenly come alive
and what people wanted to happen could happen—
all you had to do was say it.
Nobody could explain this:
That's the way it was.

English version by Edward Field, from Knud Rasmussen
(after Nalungiaq 1985:10).
Enkidu, a man

[who] ran beside the ... gazelle
Like a brother
And they drank together at a pool
Like two friends
Sharing some common journey
Not needing to speak but just continue
(Herbert Mason, 1970:16).

Although commonly interpreted as the story of man's [use of the male noun is deliberate] despair at his inability to transcend death, it may instead reflect an early civilization's despondency upon conscious understanding of what had been left behind in the severance of its vital connection with the nonhuman world. The legend arises straight from the Mesopotamian period during which the perhaps 25,000-year-old goddess-as-creator-of-all-life religion, with its vibrant animistic belief in a common ensoulment of all things, was being deliberately destroyed by the rising force of patriarchy with its insistence on a sole, male god, and its concomitant separation from and dominion over the rest of the world, to be henceforth labeled "Nature."

As Paul Shepard says of today's "world religions":

Most [of them] are actually other-world and man-centered, and a case can be made that the decay of the planet as a beautiful and habitable place is in part due to value systems that scorn plants and animals and have little regard for their integrity and otherness (1985:210).

These sentiments are reflected more emphatically by Lee Durrell in the 1986 State of the Ark:

There is little conservation 'ethic' on the whole in the Arab countries, and in Iran and
Afghanistan, anything that moves is shot. ....
Traditional respect for living beings, once characteristic of this part of Asia, seems to have died (178).

It wasn't always this way ....

In 1978, at a late Palaeolithic site in northern Israel, a unique human burial was discovered. The tomb contained two skeletons: that of an elderly human of unknown sex and, next to it, the remains of a five-month-old domestic dog. The two had been buried together roughly 12,000 years ago. The most striking thing about these remains was the fact that whoever presided over the original burial had carefully arranged the dead person's left hand so that it rested, in a timeless and eloquent gesture of attachment, on the puppy's shoulder. The contents of this tomb not only provide us with the earliest solid evidence of animal domestication, they also strongly imply that man's primordial relationship with this particular species was a deeply affectionate one. In other words, prehistoric man may have loved his dogs and his other domestic animals as pets long before he made use of them for any other purpose (James Serpell, 1986:58).

In her introduction to *The Walking Larder: Patterns of Domestication, Pastoralism, and Predation*, Juliet Clutton-Brock theorizes:

The hunting of some animals and the keeping of others as valued companions was as much a part of human nature 10,000 years ago as it is today. Just as the domestic dog has the same behavioral patterns as the wolf, so the modern human probably differs little in his or her genetically inherited behavior from the earliest Homo sapiens. It is only the development of culture and the ensuing pressures of social systems that change (1989:1).

With that thought in mind, this chapter examines the general movement of human societies along a continuum from the earliest Earth-oriented (cooperative) cultures to the contemporary Earth-liberated (exploitive) worldviews.
Notice, in the ensuing historical overview, how the approach to exploitation necessitates a cutting off or turning away from communication with the other animal species.

The oldest tradition of human-nonhuman communication speaks to the dependence of people on the wild animals to teach them how to survive. In fact, the origin mythology of many cultures attributes the very "birth" of their people to animals: Raven found and freed the first Haida from a clam shell; a small bird delivered the Pueblo people from the underworld through a small hole, or sipapu, to their aboveground life; and in some Native American traditions, we wouldn't even be here had Turtle not swum up from the watery depths of the universe carrying Earth on her back, to cite just a few of the innumerable and widespread legends.

It is difficult for us today even to imagine the intimacy with and dependence of early humans on the other animal species. In an analogy that should be well known to most Americans, consider the former dependence of the Plains Indians on the vast bison herds for meat, clothing, shelter, and literally a whole way of life which shattered upon decimation of those herds by the invaders. Or the Bedouin knowledge of and intimacy with camels even at present day. Or, as Bernard Singer writes in The Oxford Companion to Animal Behavior:

In the same way, the Nuer of the southern Sudan lives a life of almost complete interdependence
with his herds of cattle (Bovidae). Evans-Pritchard in The Nuer (1940) gives an interesting picture of the nature of this relationship: 'The men wake about dawn at camp in the midst of their cattle and sit contentedly watching them till milking is finished. They then either take them to pasture and spend the day watching them graze, driving them to water, composing songs about them, and bringing them back to camp, or they remain in the kraal to drink their milk, make tethering-cords and ornaments for them, water and in other ways care for their calves, clean their kraal, and dry their dung for fuel. Nuer wash their hands and faces in the urine of the cattle, especially when cows urinate during milking, drink their milk and blood, and sleep in their hides by the side of their smouldering dung. They cover their bodies, dress their hair, and clean their teeth with the ashes of cattle dung, and eat their food with spoons made from their horns. When the cattle return in the evening they tether each beast to its peg with cords made from the skins of their dead companions and sit in the wind-screens to contemplate them and to watch them being milked' (1987:255).

The mythologist Joseph Campbell quotes the Pawnee chieftain Letakots-Lesa as saying that the One Above

... sent certain animals to tell man that he showed himself through the beasts, and that from them ... man should learn .... (1988(I,1):10).

To the present day the shamanic healers of many cultures leave their bodies during ceremonies to enter into consultation with animal helpers to diagnose and treat a person's illness—still going back to the "animals" for knowledge and/or solutions\(^\text{13}\) for problems or illnesses.

\(^\text{13}\) An ancient folktale attributes the invention of Chinese characters (letters) to the "animals":

In his [Ts'ang Chieh, a wise minister of the court] mind was born the great idea of inventing letters or characters so that men could express
Although far more food was produced by the gathering activities of women (as is still the case in most parts of the world) than has been formerly believed of early human cultures (Singer 1987, Tanner 1981, Campbell 1988, among others), the hunting of "animals" was important not only for meat, but hides for clothing, bone for implements, etc. There was therefore a crucial need for a very intimate knowledge of and thus communication with the other animal species on the part of early women and men.

In general this pattern of life was enacted within a societal medium of great respect for the feminine capacity to negate death by giving birth to new life over and over again. The renewing cycles of the natural world, obvious to a people whose survival depended upon them, were equated with the female (of all species) capacity to give birth. Earth itself was seen as female, giving birth and providing sustenance to all "her" children. Thus from the earliest times, the supreme life spirit or "Creator" was seen to be female. In fact, rapidly accumulating archeological evidence worldwide (Barstow

their thoughts to one another in some other way than by word of mouth. But how was he to construct the letters?

One day, when he was walking on the seashore, Ts'ang Chieh saw on the soft sands the marks of a bird's claws and the tracks of several other animals. The neat little footprints, so like little pictures, impressed him very much. Then in a flash, he saw a way of making written characters (Lim 1944:68).
1983, Stone 1976, Campbell 1988) points increasingly to at least 25,000 years of primary female deification prior to the advent of the present 5,000 to 6,000-year-old tradition of primary male deities.

Deification of the female established as well traditional feminine values of caring and communality (see Chapter 6) in the human group or society.\textsuperscript{14,15} This encouraged an animistic belief in all living beings as ensouled and therefore the equal of humans. Indeed often they were seen as more knowledgable and/or more powerful than humans. One can imagine, between the physical proximity to as well as dependence upon the other species and the aforementioned value system, that a great deal of human–nonhuman communication took place over the millennia, and this is indeed confirmed in the prolific rock paintings, sculptures, and other artwork now coming to light (see, for instance, Morphy, Howard (ed.), Animals Into Art, London: Unwin Hyman, 1989).

\textsuperscript{14} ... on the whole, Neolithic art [considered an extension of the Paleolithic Goddess orientation], ... seems to express a view in which the primary function of the mysterious powers governing the universe is not to exact obedience, punish and destroy but rather to give (Eisler 1987:20).

\textsuperscript{15} This better way includes kinship, egalitarianism, and nurturance-based values which women experienced and projected not only on their goddesses but on to every creature among them. By contrast, when men invented their gods, they projected on to them isolated individualism, hierarchical relationships and power-based values which are reflected in patriarchal social arrangements (Collard 1988:8).
As in most hunter-gatherer societies at present day, it is believed that more or less egalitarian relationships existed between men and women, each performing valued and respected functions contributing to the overall survival of the group and the continuance of its lineage (Lerner 1986).

What we would today call "political power" was apparently diffuse in these earliest times. It was both decentralized and localized among the nomadic bands. Common to many societies which live by gathering and hunting, at some point in the early history of humans totemic culture came into being, its core a set of myths or stories about creation which narrate events in the first society of beings. Each human grouping or clan is dedicated to a totemic animal, plant, or some other natural object, usually believed to be of common ancestry, of which it is guardian, keeper of its secrets, interpreter, and representative.

16 Speaking of Paleolithic rock paintings, Joseph Campbell remarks that the sociological problems of conflict control created by increased human population at the end of the last glacial age (some 30,000 years ago) were probably responsible for the emergence of "symbolic figurations, through which the regulations of a corpus of socially constructive rituals were pictorially encoded for storage and transmission through generations" (1988(1,2):129). The obscure beginnings of totemic culture may have been similarly inspired perhaps even at that same time.
The relationship between clans is defined by selected details of the relationship between their totemic animals according to a myth; that is, a rhetorical story about the totem animals in the beginning of time. If not the myths, then observations of the creatures themselves give clues, to be poetically translated from ecological relations to their social analogies, to all the problems or circumstances of the interrelationships of those humans who are pledged by their clan identity to the mythic structure.

As every child has learned, each creature not only has a predominant character, but the whole of his behavior is in harmony with other animals. The animal totems of the two members of a dispute, for example, are not appealed to as sources of power but as related to each other either through myth or biology so as to evoke ideas and parallel logic for resolving the conflict. The logic is a kind of thought-wedge. The clues may range from details in myth to study of the animals' entrails, fur, or parasites, even to its most subtle responses to the environment and interactions with others. Modern urban people cannot appreciate the subtlety of such study because they so seldom watch or examine animals and are generally ignorant of the remarkable complexity and delicacy of nonhuman life. The crucial point of this sign-reading is that there is seldom a literal interpretation. Eating, fleeing, rising—earlier-than, living underground, migrating, or howling do not imply those behaviors among people to the totemic watcher, but are merely indicators (Shepard 1985:212).

Everyone in such a clan society is a member of a totemic group. Membership may be determined by family, gender, dreams or omens, or by group observation that a certain member reflects the traits of a particular totem. Among the present day Kwakiutl, a totemic Indian people of the coast of British Columbia, the rights to masks, songs and dances are owned by families, and are said to have been given to their ancestors by the early mythical animals when clan lines were being established.
The dance rites express an age-old communion between the Indians and the wildlife they live among:

The agent of this transformation is an elaborately carved mask. Once he puts it on, a man becomes the animal and the animal becomes the man. ....

The early animals are said to have taught man the proper ceremonies, or 'adjustments,' that he must make so that a successful hunter-prey relationship can flourish. The adjustment is partly one that responds to a moral question: how do you justify killing? You kill quickly, you show respect to the slain animal who makes your life possible, you never waste—and, in the dancing, you become one with the animal's spirit (Anne Mayhew 1986:17).

As predators, hunter-gatherers' relationships with their prey are culturally constructed as ones of reciprocal exchange and appeasement in ensuring each other's existence. Richard Tapper (1988) labels this a Marxian notion of a "communal system," and further categorizes human-'animal' relations of production as follows:

Some hunters tame certain animals (such as dogs or reindeer) to help with the hunt. Individual animals are taken out of their natural species community and subjugated to provide labour for the human production process. These, unlike other tamed animals that hunting peoples also frequently keep as pets, are treated as slaves, their feeding and reproduction under the control of their human masters. This 'slave-based' or 'ancient' system of production relations between people and animals also characterizes those cultivators who use draught animals.

More extensive livestock rearing by pastoralists involves animals that are not tamed but are herded in communities and following their natural inclinations to move, congregate, graze and breed. Again, these are subservient to and controlled by human masters, but the relation is like a contract or transaction in which the masters 'protect' the herds in return for a 'rent.' This resembles the Marxian conception of feudal relations between lord and serfs (52).

Toward the end of the Paleolithic Period, in suitable
ecological regimes pastoralism, the practice of herding "animals," came into being often supplemented by the continued hunting of wild game. The desire of pastoralists to appease the spiritual guardians of the herds reflected continuance of the hunting societies' regard for and interspecies communication with nonhuman animals. But the conversation may be said to have evolved from "animals" as teachers of humans to an "I do for you; you do for me" relationship.

Tim Ingold (1987) points out the interesting corollary between sacrifice or ritual slaughter of a domestic "animal" and the religious drama surrounding the hunt.

In the hunt, a presentation of animals is made by the spirit to man; in the sacrifice, men present animals to the spirit. In both, the shaman intervenes as propitiator, 'calling' the spirit to send animals to the hunter, and to accept animals from the pastoralist. Whether hunted or sacrificed, reindeer are, of course, consumed by humans: so it is only the soul of the victim that is released to its spiritual 'master' in sacrifice, just as it is only the bodily substance of the wild animal that is released to man in the hunt (244).

Even though transfer of control over the disposal of animals is shifted from the supernatural to humans, Ingold sees this as a ritual inversion rather than a trend towards the secular.

While some pastoralists remained nomadic, the advent of the Neolithic Period (approximately 7,000 to 4,000 B.C.) is generally regarded as an agricultural revolution, "... for what was involved was principally the domestication of plants and animals and the resulting emergence of the farming village as a new nexus of social organization (William Hallo and W. K. Simpson 1971:11)."
Domestication of plants and animals has generally been attributed to women (Campbell 1988 (I,1), Tanner 1981, Serpell 1986, among others). As Riane Eisler (1987) explains:

...most scholars today agree that this is probably how it was. They note that in contemporary gatherer-hunter societies women, not men, are typically in charge of processing food. It would thus have been more likely that it was women who first dropped seeds on the ground of their encampments, and also began to tame young animals by feeding and caring for them as they did for their own young (68).

However the new form of social organization into agricultural communities or villages brought about an interesting shift in the male-female balance of power in the ancient Near East, and with it a marked difference in human-nonhuman interaction. For the formerly brief reign of a seasonal Prince, or annual male consort to the Goddess, of each locality apparently began to be lengthened over the centuries, to King-Goddess unions of joint power, until approximately 3,000 to 2,000 B.C. when archeological evidence reveals male rulers appointing the High Priestess (Stone 1976, Ochshorn 1983). Thus, although occurring at different times in various regions of the world, the general movement was, and still is, from a strongly feminine influence to domination by the masculine. In fact during 5,000 to 4,000 B.C. in Egypt, male rulers not only gradually usurped the powers of goddesses but, as James Breasted writes:

For ages of prehistoric time the Sun-god remained a nature god. In the remotest past therefore it was only with material functions that the Sun-god had to do. In the earliest sun-temples at Abusir, he appears as the source of life and increase. ....
But as the Nile Valley, where the Sun-god had so long appeared as a power of Nature, was slowly being transformed into a great nation, his field of action was inevitably to become one of human life and national affairs (1935:26).

Thus began the Pyramid Age of pharaohs who were both supreme earthly ruler and supreme god! Political power became highly centralized:

Of the historical processes which brought about the First Union, we know nothing but it is certain that a prince of On, the city later called by the Greeks Heliopolis, had subdued the other prehistoric principalities of Egypt and united the country for the first time under one sovereign, probably not later than 4000 B.C. Not an echo of his name has ever reached us across the interval of some six thousand years which has elapsed since then; but his work left a permanent mark on Egyptian life and civilisation, for he founded and set going the first great national organization of men, controlling the life of a population ....(Breasted 1935:26).

And so it was in centers of early "civilization" throughout the human inhabited world. The move toward political centralization both reflected and endorsed the more aggressive of masculine values, with resultant dwindling of the feminine-influenced life giving and nurturing values. Cultural values and definitions can and do override differences in orientation toward "the other" which are not necessarily restricted by the sex of the individual, so much as by what orientation the culture or society will accept in its male and female individuals. We begin to see increased use of animals [here, both human and nonhuman] as machines of war, the
destruction or captivity of wild animals as status symbols, and almost exclusive male ownership of domestic herds and working animals.

In time the equating of the male human almost worldwide with a supreme male deity (God, Allah, Vishnu, Krishna, Buddha, etc.) led to a belief in his right to dominion over the Earth and the subjugation, along with women, of the other animal species to his needs or desires. Pastoralism became ranching, the herding of large numbers of "animals" on a confined range—a purely exploitive relationship on the part of their owner who generally has little or no contact with individual "animals," no less communication with them. From there, it was but one short step to today's factory farms, the "ranching" of furbearers and game species, and more recently the "farming" of wild species such as bears, civets, elk, tigers, etc. for body parts and/or "hunting" trophies.

Tapper (1988) contrasts these modes of production with those (page 53) incorporating human-"animal" social relations:

In ranching, ... human-animal relations are again different. ... control [is] exercised not under the contractual system inherent in pastoralism, but by use of superior force (even violence) and technology .... Urban-industrial society, finally, is dependent for animal products on battery- or factory-farming. The animals that feed us are reduced to machines, kept in artificial conditions in which the concern of the owners is profit through cost-effective organization of the animals' productive labour and reproduction. These are clearly exploitative relations on classic capitalist lines .... (53).
What does this do to human perceptions of, attitudes toward, and thus communications with nonhuman animals?

Thirty thousand years ago Neanderthal people sensed and feared a power greater than themselves in the presence of the huge early Paleolithic cave bears which they killed from time to time (Campbell 1988(1,1)). The dead bear was venerated in rites of respect, gratitude, and appeasement. As the Neolithic Period ended, no doubt men in positions of power became increasingly confident in their own abilities to control the world around them and less willing to attribute beneficial occurrences to nonhuman forces solely. (Disasters, however, are to this day attributed to "God" and "Nature.") Thus the humility of early human societies has come to be replaced over the millennia with the hubris or arrogance of the controlling elite of modern "civilizations."

Accordingly, James Serpell (1986) provides what he terms a catalogue of distancing devices to illustrate

...how the shift from traditional hunting to progressively more and more intensive systems of animal exploitation has been accompanied by the evolution of increasingly sophisticated methods of evading guilt. As a predatory species, it seems, we are confronted with a hideous moral dilemma. Our highly developed social awareness enables us to understand and empathize with animals, just as we understand and empathize with each other. .... This is fine so long as the partnership is mutually rewarding, .... But it gives rise to unacceptable contradictions when our purpose in using animals involves their eventual slaughter, subjugation or maltreatment. ... the burden of guilt has grown to the point where it can no longer be expiated through simple acts of ritual atonement. So we have created an artificial distinction between us and them, and have constructed a defensive screen of lies, myths, distortions and evasions, the sole purpose of which has been to reconcile
or nullify the conflict between economic self-interest, on the one hand, and sympathy and affection on the other (169).

All symptomatic of the desire to avoid human-nonhuman communication, Serpell's distancing devices fall roughly into four categories: shifting the blame, misrepresentation, concealment, and detachment.

The phenomenon of shifting the blame for the slaughter of "animals" began within the Neolithic Period itself with the custom of the sacrifice. As discussed on page 51, the gods were said to demand from time to time this act of propitiation which, of course, allowed all present to eat their fill of meat. This custom is also the vehicle by which contemporary pastoralists such as the Nuer of Sudan (see page 45 of this chapter) justify the slaughter of their domestic stock today. In a more catastrophic vein, blame shifting is also the mechanism for much of the current large-scale habitat destruction around the world to "benefit humanity."

Misrepresentation, according to Serpell, is a popular method of justifying the exploitation of nonhuman species by "deliberately or unconsciously distorting the facts about them so that their suffering and death seems necessary or deserved" (1988:159). One aspect of this phenomenon is to equate the "animal" presence with undesirable human traits: the beast that lies hidden in the dark depths of humans and must be annihilated, e.g. the "malevolent" wolf, the "overpowering, violent" gorilla, etc. Another
is to blatantly accuse the nonhuman species of bloodthirstiness, or the lust to kill, e.g. the "ferocious" lion and almost all species of big cats, etc. Of course coyotes, foxes, weasels, skunks, ground squirrels, etc. are all "vermin" out to destroy human enterprises. And domestic species, e.g. cattle, sheep, chickens, pigs, etc. can't think or feel (in spite of the fact that they're "good," as opposed to wolves, cougars, coyotes, etc. who are "bad")! Deer and skunks are "stupid," so they are killed by speeding vehicles. All of these "attributes" of a species, according to Serpell "can then be used as an excuse for killing it, brutalizing it, or being indifferent to its welfare" (1986:159).

Concealment takes place in two major ways:

(1) the killing/torture of the animal is hidden from the public eye, e.g. abattoirs, factory farming, the "culling" of wild species, "vermin"/"varmint" control, medical and laboratory experimentation, etc.;

(2) deceit is built into the language, e.g. pork/pigs, beef/cows, venison/deer, sacrifice/kill, euthanize humanely/kill, harvested pelts/animals killed and flayed, conditioned/forced by physical torture, etc.

Detachment is by far the most widespread method of distancing from or blocking communication with the other animal species. It involves a desensitizing of the human so that his/her relationship with the other species becomes entirely devoid of emotional content.
Serpell puts it well:

It isn't so much that we avoid killing the animals with which we are friendly. It is more the other way around. Unconsciously or deliberately we either avoid befriending the animals we intend to harm, or we fabricate elaborate and often mythological justification for their suffering that absolves us of blame. The sad thing is that we have been practising this form of self-deception for so long that, by and large, we are scarcely aware that we are doing it anymore. The myths have become reality, the fantasies, fact. Instead of questioning our supposedly objective, utilitarian attitudes to other species, or the morality that governs our callous exploitation of animals and nature, we tend to ridicule or denigrate those who take the opposite view. People who display emotional concern for animal suffering, or the destruction of the environment, or the extinction of wild species are often treated as misguided idealists. While those who allow themselves to become emotionally involved with companion animals are considered perverted, pathetic or wasteful. And all of them are damned with the accusation of sentimentality, as if having sentiments or feelings for other species were a sign of weakness, intellectual flabbiness or mental disturbance. .... The truth is that it is normal and natural for people to empathize and identify with other life forms, and to feel guilt and remorse about harming them. It is the essence of our humanity. What has not been emphasized previously is the fact that close social bonds with animals are emotionally fulfilling, and that they therefore constitute a benefit which frequently conflicts with economic demands (1986:170).

Today the widely prevalent and highly contagious politics of capitalism serves to underscore and reinforce these modes of distancing from the other animal species. It is enlightening to consider Robert Heilbroner's (1953) explanation of why it took so long for the concept of capitalism to take fire:
... the whole world until the sixteenth or seventeenth century—could not envision the market system for the thoroughly sound reason that Land, Labor, and Capital—the basic agents of production which the market system allocates—did not yet exist. Land, labor, and capital in the sense of soil, human beings, and tools are of course coexistent with society itself. But the idea of abstract land or abstract labor did not immediately suggest itself to the human mind, any more than did the idea of abstract energy or matter. Land, labor, and capital as 'agents' of production, as impersonal, dehumanized economic entities, are as much modern inventions as the calculus. Indeed, they are not much older (18).

But, as he goes on to say, thanks to the birth of "'economic man'—a pale wraith of a creature who follows his adding-machine brain wherever it leads him" (28):

No mistake about it, the travail was over and the market system had been born. The problem of survival was henceforth to be solved neither by custom nor by command, but by the free action of profit-seeking men bound together only by the market itself. The system was to be called capitalism. And the idea of gain which underlay it was so firmly rooted that men would soon vigorously affirm that it was an eternal and omnipresent attitude (1953:29).

The damage to human-nonhuman relations is not confined to direct interaction between "economic man" and the other species. The oppression of many humans, engendered by a philosophy of greed and power among some, yields what Frantz Fanon has described as "a diffused and steady rage in the oppressed populations" (1963: ). We opened this chapter contemplating the evidence for nonhuman animals as the preeminent emissaries or tangible manifestations of "Nature." Given the schism between modern man and
the rest of the natural world, to what extent do wild animals then become the victims of further misdirected, predominantly male aggressions and hostilities?
CHAPTER SIX
THE UNNATURALISM OF PATRIARCHIES

We know that art, particularly religious or mythical art, reflects not only peoples' attitudes but also their particular form of culture and social organization. .... And if the central religious image [in the time of Goddess-centered art] was a woman giving birth and not, as in our time, a man dying on a cross, it would not be unreasonable to infer that life and the love of life--rather than death and the fear of dying--were dominant in society as well as art.

- Riane Eisler (1987:20)

The extent to which caring emotions are devalued by a society is directly proportional to the deliberate undermining of the human capacity for bondedness. That bondedness may be to other humans, to nonhumans, to a place called home, and/or to the natural world.

In modern times, apart from forcible removal which speaks for itself, the first step in shattering bonds occurs when a person's workplace is removed from the home as commonly occurs when a cash economy replaces self-subsistence. Not only does this necessitate the worker's absence from the place of bondedness, it creates a schism between family members, usually removing the adult male17 (husband or father) from other family members.

Institutionalized education further fractures family bonds by removing children from the homeplace for, at

17 In the past decade, transnational industries have found it more expedient to employ the female parent; women can be paid less, are compliant employees, and are highly motivated by the needs of dependent family members.
best, most of the day (in some cases for weeks or months, e.g. the BIA boarding schools for American Indian children). When a worker is required to permanently relocate in pursuit of employment, typically any family members other than the nuclear family (the couple and their offspring) are left behind. A further disconnection occurs with the loss not only of place, but of human community of friends and/or related family members as well. In industrialized societies, the bonds that are shattered are expected to be replaced by allegiances to workplace (employer or corporation), and to government (nationalism) or, as Mary E. Clark writes:

In place of real bonds we use symbols: awards, honours, income, consumption level, prestige, titles. These serve as surrogate bonds, reassuring us that we do belong and are an accepted member of society. Our exaggerated concerns for recognition, approval, status, and 'success' are substitutes for truly belonging. This artificial form of social identity has two great psychological failings. First, since belongingness is never based on real bonds it is always insecure. Underneath lies a constant fear of alienation; we are never sure that we are still valued. ....

Second, since all these surrogates for real social bonding are measures of one's relative position in an impersonal society, they generate unending competition (1989:312).

What I am describing is the social reinforcement of alienation. It is in the name of material well being. It is part of the fragmentation created when the dominant force in a society does not recognize the natural interrelatedness of beings--that is to say, the desire for connectedness with others.
The advent of almost worldwide patriarchy in the third or fourth millennium B.C. with its sex based domination of power has subverted, often by violence, the equal participation by women both in the functioning of, and more importantly, in the ideological foundations of society. This exclusion has been to the detriment of all members of the society. It has created an unnatural worldview in that its veneration of individual profit and power to the detriment of communal and life-sustaining values is ultimately both self- and ecologically destructive.

These are strong statements which, I believe, can be clarified by a brief digression into developmental psychology.

In a paper published in 1974, Nancy Chodorow suggested

...that a crucial differentiating experience in male and female development arises out of the fact that women, universally, are largely responsible for early child care and for (at least) later female socialization (43), accounting for basic sex differences in personality. The child's prenatal experience of being emotionally and physically a part of the mother continues during lactation. This primary identification with the mother is enforced by the fact that, in most societies, it is solely or mostly the mother (and/or other women) who provides essential child care services, so that the child

18 "Unnatural" is defined as:
1. ...at variance with or contrary to nature or the course of nature. 2. lacking natural or proper instincts, feelings, habits, etc. (Random House Dictionary, 1966).
interacts almost entirely with her (and/or in a world of women).

This is followed during the first few years by a period of preoccupation with issues of separation and individuation for both boys and girls.

This includes breaking or attenuating the primary identification with the mother and beginning to develop an individuated sense of self (Chodorow, 1974:46).

The development of a girl's gender identity does not involve rejection of early identification with her mother. Strengthening this closeness is the fact that mothers, themselves, generally identify more easily with daughters than with sons. These phenomena combine to increase the probability that a female child will continue to experience connection to "the other," and this personal quality will maintain and extend itself to a field of "others." Furthermore,

...[b]ecause her mother is around, and she has had a genuine relationship to her as a person, a girl's gender and gender role identification are mediated by and depend upon real affective relations (Chodorow, 1974:51).

The girl will feel connected to, and identify with, very real "others."

The period of self- and gender identification is more problematic for a boy. As he becomes aware (through the gradually increasing presence of his father and other males) that he is different than his mother, a boy's gender identification must come to replace his early
primary identification with his mother. Additionally, as mentioned above, since mothers identify less readily with their sons, a male child feels "pushed" toward differentiation by a subtle emphasis by her on his masculinity. But since, in most societies, a father's work and social role make him more remote to his children, the boy comes to experience not only a disconnection from his primary identification with his mother, but a separatism as well that reflects his internalization of a male (his father's) gender identification without there being an actual presence of "the other"—a "positional" identification rather than a personal one.

Thus, Chodorow proposes:

... in any given society, feminine personality comes to define itself in relation and connection to other people more than masculine personality does. (In psychoanalytic terms, women are less individuated than men; they have more flexible ego boundaries.) ... For boys and men, individuation ... become[s] tied up with the sense of masculinity, or masculine identity (1974:44).

Girls are thus pressured to be involved with and connected to others, boys to deny this involvement and connection (1974:55).

Chodorow goes on to quote

Bakan (1966) [who] claims that male personality is preoccupied with the 'agentic,' and female personality with the 'communal.' His expanded definition of the two concepts is illuminating: I have adopted the terms "agency" and "communion" to characterize two fundamental modalities in the existence of living forms, agency for the existence of an organism as an individual and communion for the participation of the individual in some
larger organism of which the individual is a part. Agency manifests itself in self-protection, self-assertion, and self-expansion; communion manifests itself in the sense of being at one with other organisms. Agency manifests itself in the formation of separations; communion in the lack of separations. Agency manifests itself in isolation, alienation, and aloneness; communion in contact, openness, and union. Agency manifests itself in the urge to master; communion in noncontractual cooperation. Agency manifests itself in the repression of thought, feeling, and impulse; communion in the lack and removal of repression (1974:55).

In her introduction to Caring: A Feminine Approach to Ethics and Moral Education, Nell Noddings extends these ideas one step further. Ethics, states Noddings, has concentrated on the establishment of principles and that which can be logically derived from them. One might say that ethics has been discussed largely in the language of the father: in principles and propositions, in terms such as justification, fairness, justice. The mother's voice has been silent. Human caring and the memory of caring and being cared for, which I shall argue form the foundation of ethical response, have not received attention except as outcomes of ethical behavior. ....

This approach through law and principles is not, I suggest, the approach of the mother. It is the approach of the detached one, of the father (1984:1).

According to Noddings, an ethic of caring is a... practical ethics from the feminine view. It is very different from the utilitarian practical ethics of, say, Peter Singer. While both of us would treat animals kindly and sensitively, for example, we give very different reasons for our consideration. I must resist his charge that we are guilty of 'speciesism' in our failure to accord rights to animals, because I shall locate the very wellsprings of ethical behavior in human affective response. ... it is necessary to give appropriate attention and credit to
the affective foundation of existence (1984:3).
[Underscoring added.]

It is this affective foundation of existence which enables the "one-caring" to locate morality primarily in pre-act consciousness of the "cared-for":

When my caring is directed to living things, I must consider their natures, ways of life, needs, and desires. And although I can never accomplish it entirely, I try to apprehend the reality of the other (Noddings, 1984:14).

This inherent ethics of caring peculiar to women may be the pivotal factor accounting for the differences in general between men and women as regards their attitude and/or relationship to the other animal species. Marti Kheel (1985) points out that in the early 1900's women made up such a large part of the humane movement in England and America that had their support suddenly been withdrawn, the large majority of societies for the prevention of cruelty to both children and nonhuman animals would have ceased to exist. Stephen Kellert (1983), in an extensive survey of affective, cognitive, and evaluative perceptions of nonhuman animals by Americans, found that while most respondents supported activities such as harvesting furbearers, whaling, fishing, and hunting if there is adequate justification for the activity and cruelty to the animals is kept at a minimum, only a minority of women approved of these practices.

If indeed, as Chodorow points out, the early internalization of these basic gender differences is an unconscious feature
of personality, the frequent inability of women living in patriarchal societies to comprehensively analyze, articulate, and defend their perceptions of and attitudes toward the other animal species becomes understandable. Articulation and successful defense of perceptions of communion with, and attitudes of cooperation toward, nonhuman animals are further confounded by conditions of (1) living subordinately, (2) in a male-dominated world which recognizes linear or hierarchical thought patterns rather than "webs" of connection, (3) while being forced to express oneself in what often is a male language, e.g. English, lacking words to describe adequately other ways of thinking, as alluded to on page 10 of this thesis. This is particularly pronounced in technologically advanced societies which believe themselves insulated from, and have therefore become indifferent to, the rest of the natural world.

While most patriarchal societies have condoned, indeed reinforced, an attitude of distancing from "the other"--be it humans, nonhumans, or the natural world--as we have seen in Chapter 5 other societies have counteracted the male tendency toward "agency" by the guidance of cultural traditions and/or rituals. Commonly, these have taken the form of initiation during puberty into manhood (or womanhood), into totemic clans and/or into guilds or age classes. In any event, what these traditions
have accomplished is the successful transition of a youth into adulthood complete with an understanding of his/her proper role as a man/woman in the community. Further, the rituals and traditions established the individual's, as well as the human community's, place within the natural environment including, of course, those nonhuman species with which they interact.

Far from inculcating perspectives of belonging to the natural community, Western institutions for example often function to denounce these attitudes. A typical incident, in this case regarding the ever present conflict between human desires and wildlife habitat, is illustrated by an article in The Missoulian (December 22, 1990) under the headline, "FWS discounts outcry over 'nuisance' grizzly hunt":

When the Yellowstone-area nuisance hunt was proposed and opened to public comment earlier this year, the federal agency received hundreds of letters opposing the idea, [chief of the endangered species unit of the U. S. Fish and Wildlife Service] said. Most of the letters said no grizzlies should be shot because humans have invaded their habitat, threatening the bears' survival, he said.

But wildlife officials decided to proceed with the plan because the public comments were emotional and did not make a 'valid biological point,' [he] said. He said grizzlies can become habituated to human areas and food [the very point the letters were making!] and that some of those bears will have to be killed by someone [a valid biological point?].

'We know that bears become habituated to areas where we don't necessarily want them,' he said. 'You can move them, turn them upside down and they still come back. In that case,
there's nothing you can do but eliminate them'.

Indeed this reflects a remarkably incongruent attitude on the part of an official of the federal agency sworn to uphold the Endangered Species Act, the passage of which into national law demonstrated a clear pro-wildlife message from the American public.

The blindness of this world view goes farther than its refusal to acknowledge a connection with the other animal species. It actively promotes the destruction of habitat on a massive scale in the name of benefiting humanity, as shown in the following recounting by Vandana Shiva.19

The link between forests and food is clear to the women who produce food in partnership with trees and animals. The patriarchal model, in contrast, sees forestry as independent of agriculture, and reduces the multiple outputs of the forest including fertilizer and fodder, into a single product—commercial wood. Animals are no longer seen as providing fertilizer and energy for agriculture, and through the 'white revolution', animal husbandry is reduced to the production of milk for the centralised dairy industry. Organic inputs from forests and animals are no longer seen as mechanisms for conserving soil moisture; large dams become the patriarchal option for providing water for food production. Organic manure is no longer a fertilizer; it is fertilizer factories

19 Shiva abandoned a career as a leading physicist in India because she believed that late twentieth century science posed such a threat to "the web of life" that a committed scientist must take the part of Nature against further destruction. She became involved, among other things, with the ongoing women's Chipko movement to preserve the remaining forests of the hill country of India.
that are seen to be the only source of soil fertility. Rich soils and appropriate cropping patterns are no longer mechanisms for pest control; poisons for killing pests become an inevitable component of patriarchal agriculture (1989:98).

Shiva strongly denounces modern science as a project of Western patriarchy which in its arrogance dismisses the knowledge of both feminine and traditional (local) sciences. She cites in example:

Women throughout India have resisted the expansion of eucalyptus because of its destruction of water, soil and food systems.20 On August 10,

20 Shiva writes:
Industrialists, foresters and bureaucrats loved the eucalyptus because it grows straight and is excellent pulp-wood, unlike the honge [Pongamia globra] which shelters the soil with its profuse branches and dense canopy and whose real worth is as a living tree on a farm. The bonge could be nature's idea of the perfect tree for arid Karnataka. It has rapid growth of precisely those parts of the tree, the leaves and small branches, which go back to the earth, enriching and protecting it, conserving its moisture and fertility. The eucalyptus, on the other hand, when perceived ecologically, is unproductive, even negative, because this perception assesses the 'growth' and 'productivity' of trees in relation to the water cycle and its conservation, in relation to soil fertility and in relation to human needs for food and food production. The eucalyptus has destroyed the water cycle in arid regions due to its high water demand and its failure to produce humus, which is nature's mechanism for conserving water. Most indigenous species have a much higher biological productivity than the eucalyptus, when one considers water yields and water conservation. The non-woody biomass of trees has never been assessed by forest measurements and quantification within the reductionist paradigm, yet it is this very biomass that functions in conserving water and building soils (1989:80).
1983, the women and small peasants of Barha and Holahalli villages in Tumkur district (Karnataka) marched en masse to the forest nursery and pulled out millions of eucalyptus seedlings, planting tamarind and mango seeds in their place. This gesture of protest, for which they were arrested, spoke out against the virtual planned destruction of soil and water systems by eucalyptus cultivation. It also silently challenged the domination of a forestry science that had reduced all species to one (the eucalyptus), all needs to one (that of the pulp industry), and all knowledge to one (that of the World Bank and forest officials)(1989:82).

That these incidents are not specific to India is borne out by the studies of such agencies as UNICEF and U. S. AID which have shown that development projects such as cash-cropping:

...often increase the burden on women and children.

The problem is illustrated by a study conducted by Kenya's Ministry of Agriculture. A sugar company had encouraged local families to grow cane on their land in order to raise their standard of living. Women tended the sugar cane, which took space away from their food crops. Researchers discovered that the cane was sold by their husbands, who then spent the money, often to buy beer. The result: increased malnutrition among the children.

'Women were not often included in development projects and many projects failed,' says Alineyayehu Abebe, forestry coordinator for Agri-Service Ethiopia (Maryanne Vollers, 1988:7).

Even though women have been systematically ignored in development projects, which, let me remind the reader, greatly affect wildlife habitat in the vicinity, Vollers states:

'Women bear the highest cost of the [environmental] crisis because of their role in providing water, food and energy to their families,' explained a statement issued in 1985 at the United Nations'
Decade for Women Conference. 'Women also have the greatest potential for contributing to the solution of the crisis, precisely due to their function in the management of those resources' (1988:5).

Vollers' article in *International Wildlife* from which I have been quoting is entitled "Healing the Ravaged Land," and describes the dedicated efforts by Third World women to combat environmental destruction at the local level. Whether it involves planting trees in Kenya, or protecting forests in India, as Vollers' points out:

... the fact that women are hammering out solutions to improve the environment strengthens the point that women can come up with ideas that benefit the society as a whole. All they need is a chance to realize their potential (1988:11).

All of the foregoing argues strongly for inclusion of the voice and knowledge of the feminine experience worldwide in today's decisionmaking. Absence of the female perspective in many societies has left voids in official policymaking at all levels, but as regards the subject of this thesis, most definitely in ecological and wildlife considerations, and as regards the subject of this chapter, most definitely in the need for valuing the human capacity for bondedness.

To sum then, gender-biased patriarchies may be considered "unnatural" in that they:

(1) denigrate, and ultimately exclude other "knowledges," particularly those of women;
(2) cannot think in terms of webs of connection and communality rather than discreet units of self as agent interacting with other agents in linear or hierarchical fashion;

(3) do not allow a society to think in terms of interconnection of humans to each other, to members of other species, or to the natural world, thereby perpetuating fragmentation and isolation; and

(4) destroy, or at best impoverish, the human capacity for caring thereby reducing communication between humans as well as between species.
CHAPTER SEVEN
RETURNING TO THE FOURTH WORLD

It's nearly over now. Most of the villages are abandoned and in ruins. The people who remain are changed. The sea has lost much of its richness and great areas of the land itself lie in waste. Perhaps it's time that the Raven or someone found a way to start again.

- Bill Reid (1980:pgs. unnumbered)

Here in front of me, on paper, is a different thesis than the one I thought I was going to write. The act of writing, the actual putting of words to paper, forced me to come to grips with what I now realize were only my impressions of both the bonding mechanism, as well as the historical relationship between people and the other animal species.

Of the bonding phenomenon ...

In retrospect I understand that I had been searching for an inherent "magical" love/affection bondedness between humans and the other animal species. What I found instead was the potential for mutual caring when and if a communication is allowed to develop. We love the things we care about; and we care about those we come to see and hear and know and who, in turn, respond to us, not those with whom there is merely a utilitarian connection.

But the first step is to see "the other"; for that we need the capacity for awareness, not just of that aspect which is of use or the way(s) in which this being might be of use, but an awareness of the entire "thou" which is before us.
The philosopher, Mary Midgley, sums this up precisely:
People who succeed well with ["animals"]
do not do so just by some abstract,
magical human superiority, but by
interacting socially with them—
by attending to them and coming to
understand how various things appear
from each animal's point of view.
To ignore or disbelieve in the existence
of that point of view would be fatal
to the attempt (Serpell 1986:150).

Communication begins with the desire to share or impart
knowledge of each other whether that be between humans
or between species.

Of the historical relationship between people and
the other animal species ...

For most of my adult life I have believed the destruction
of wild animals and their habitat attributable to global
capitalist ideology. At some level it is, but when delving
into the matter at depth, behind the ideology dwell human
valuations that will either accept or reject the twin
notions of "profit" and "power" as a construct for one's
way of being in the world. Masculine gender roles today
not only compel but glorify this mindset in men, while
feminine gender roles limit communal and nurturance values
exclusively to women. This renders comprehensible the
dominance of the aforementioned "profit and power" worldview
in androcentric societies. It also explains the destruction
throughout history of those societies in which lines
were not drawn between the sexes in either gender roles
or decisionmaking within the community. A people who
value the nurturance of all life are ill-equipped to
withstand beseigement by a people driven by the acquisition
of more resources and more power.

One who chooses to interpret "the struggle for existence" as a clear mandate for a "profit and power" dialog with the world will say "Yes ... so be it!" However if one chooses to actually read Charles Darwin's *Origin of Species* rather than to perpetuate a superficial but convenient societal endorsement of oppression, the meaning of Darwin's expression "the struggle for existence" becomes clear:

I should premise that I use this term in a large and metaphorical sense including dependence of one being on another, and including (which is more important) not only the life of the individual, but success in leaving progeny (1859, reprinted 1952:33).

But, as Andrew Colman writes:

... cooperation can evolve through gene or meme selection only in circumstances in which individual and collective interests happen to coincide and ... they often do not. This problem is ubiquitous in modern industrial societies.... ... joint cooperation, which is in everyone's interest, cannot be fashioned by the invisible hand of biological or cultural evolution because the selfish pursuit of individual interests leads inexorably to universal competition (1982:292).

That nonhuman animal species have little or no standing.

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21 The zoo is a demonstration of the relations between man and animals; nothing else. ....

The animals, isolated from each other and without interaction between species, have become utterly dependent upon their keepers. Consequently most of their responses have been changed. What was central to their interest has been replaced by a passive waiting for a series of arbitrary outside interventions. ....

... nowhere in a zoo can a stranger encounter the look of an animal. At the most, the animal's gaze flickers and passes on. They look sideways. They look blindly beyond. They scan mechanically. They have been immunized to encounter, because
in most parts of the world today is not surprising given that members of our own species are struggling for basic human rights, not to mention their very lives. News reports from South Africa, Angola, India, Los Angeles, Somalia, and these past few weeks from Srebrenica where 60,000 Muslims await whatever further atrocities to which the vengeful Serbs care to subject them, all confirm a world lost to the fragmentation and alienation of the male "agentic." There is no value placed on life; there is little capacity or incentive to apprehend "the other." There is a serious imbalance between the communal (feminine gender) and self-oriented (masculine gender) worldviews.

Though it's obvious that there is a possibly fatal, certainly destructive problem with the male "agentic" tendency, the conditions of a gender-biased patriarchy render women's input unwelcome at best, and disdained or mocked at worst. How, then, can women contribute to a culture that so badly needs feminine input?

It's time to reinject the feminine voice with its communal and life-affirming perspectives into societal affairs and decisions. By joining that voice nothing can any more occupy a central place in their attention.

Therein lies the ultimate consequence of their marginalization. That look between animal and man, which may have played a crucial role in the development of human society, and with which, in any case, all men had always lived until less than a century ago, has been extinguished. Looking at each animal, the unaccompanied zoo visitor is alone. As for the crowds, they belong to a species which has at last been isolated (John Berger, 1985:286).
to the masculine on an equal partnership basis we would be more likely to approach our professed ideal of an accepting, caring, and most importantly *viable* society within the concentric human and ecological global domains.

Simply by virtue of their sex, women do not have a deeper connection to the natural world than do men. It's more accurate to say that women, because of their empathic orientation, not only perpetrate far less destruction to their environment, but value the sustenance of life itself in human or any other form. Human history has proven men capable of the same caring attitude in cultures emphasizing biocentric rather than androcentric values.

In an epilogue to *Meant To Be Wild: The Struggle to Save Endangered Species Through Captive Breeding*, Jan DeBlieu writes:

The one path to profound change appears to be through some transformation ... that would alter the view we hold of ourselves in relation to nature. We are neither separate from nature nor above it. We must somehow learn to participate in, but not control, its evolution (1991:281).

Can we make such an immense change? It starts in small ways ...

Kate's life changed one night last November when she was sent out on a freelance photography assignment to a local nightclub in Columbus, Georgia. It turned out that the club was featuring a bear wrestling event.

... the bear, Ginger, was disabled in so many ways it was sickening [Kate said]. '... she was almost totally blind, her teeth had been removed, and she was declawed. She could not even hold her head up, probably due to oxygen deprivation since her muzzle (a massive
leather cup with two small nostril holes) was so restrictive and suffocating. When she was first brought out to fight, she stumbled and was dragged to her feet. I could hear her moans of distress. Ginger's owner-tormentors controlled her with a heavy chain and joked about her being in heat."

When Ginger is not being brutalized by drunken bar patrons who purchase a ticket to wrestle her to the floor in the hope of winning a $500 cash prize, she is either being transported in a cramped trailer or she is confined to a cage on the property of her keeper.

[Kate said] 'When I saw all of those men jumping on her and trying to wrestle her to the ground, I knew right then that if I didn't accomplish anything else in my life, I was going to try and stop bear wrestling.'

[With help, Kate] was able to strengthen the Animal Cruelty Law in Columbus so it now prohibits bear wrestling. 'I don't plan to stop here,' said [Kate]. 'Now I'm working on getting a law prohibiting bear wrestling throughout the state. .... Operation Ginger has opened up a whole new world for me. Since this started, people have been coming out of the woodwork to help!' (McBride, 1988:10).

Speaking of the acceptance of the social norm of human cruelty and indifference toward the other animal species, Michael Fox writes:

When the status quo is legal yet seems at odds with one's own feelings and ethical sensibility, a deep rage at the injustices of the world arises. ....

... emotions can have a profound influence on one's motivation and effectiveness. .... Our feelings do profoundly influence our perception and the kind of truth we live by and for. And that truth can gain in strength of conviction when we share our feelings and concerns with others in an open and nonjudgmental way. Then, and only then, will those who, for example, currently have little concern for the plight of animals and the desecration of the natural world undergo a radical change in perception and begin to feel, to empathize. And when this process of empathetic identification begins,
people's will is awakened. Without the will to change, there can be no motivation to make this world a better place for all creatures great and small (1990:7).

* * * * * *

Across the ages and around the world, appearing again and again in the religions and myths of many cultures, the artists, storytellers, and shamans have told this story of the human journey on Earth:

In the First World, or the beginning cycle of creation, dream time, or the time of the Old People:

... before there was night and Heaven and Earth were separated, all animals, including humans, could speak to one another at will. There were no barriers. No fear. No death. Any being could take the form he chose, and all language was magic (Guss 1985:xiv).

The Second World was a time of confusion, caused by divisions:

Consciousness was split in two and suddenly everything had a right and left, light and dark, wet and dry, visible and invisible. It was a time of confusion, especially until the firsts shamans discovered how to reconnect the two halves. Then balance was restored. But they had to keep moving back and forth, changing forms constantly (Guss 1985:xiv).

The Third World is the cycle of the present; it is our world, the time in which we live. Everything is divided, and the memory of initial harmony has faded.
In the Fourth World, the one to come, all things will be reconnected once again.

This is the cycle of the Apocalypse [or Revelation], of miraculous deaths and rebirths, of the reunification of Earth and Sky, and human and animal, dream and reality, word and magic. It is the time when all opposites are joined and all divisions dissolved; the time of wisdom and completion (Guss 1985:xv).

We are at present lost in the Third World: everything is divided, isolated, fragmented. But we are beginning to sense our loss of connection with each other, with the other animals, and with the health of the natural world which is our home. Many people believe humans to be the only species that can think ahead, see the future. Now is the time to call forth that capability, to begin the long journey of returning to our reconnected Fourth World.
Things have not turned out well between us. As centuries passed, Bear Mother's story was slowly eclipsed by the exploits of her sons (who gradually became more and more human, less and less bear), the straightforward heroics of the hunt, the ritual, and the propitiation of the dead bear's soul. Then, as the shamans began to gather power, sacrament became sacrifice; the bears were chained and clumsy. The old vision of ursine powers faded, became a medieval symbol of lust and sloth. Then the dancing bear of the circuses, ....

Had we ever really understood what it was all about? For the Paleolithic men who killed the animal, then asked for forgiveness, the story took place in the light of day. But Bear Mother's tale unfolds in the shadows of the psyche, a parable of the wilderness realm of the self, the creature of the forest that lives in each of us, both bestial and sublime.

I stand here in the chill, remembering how the fur on the bear's shoulders, rippling as it went up the cliff, still held a faded shimmer. And for an instant the taste of homesickness comes into my mouth, as sharp as salt.

I want to call out, to both the sleeper in that cave of dreams and the real animal, to frame some expression of gratitude for what has been between us, some hope for his future.

- Lynne Bama (1990:62)
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