When discussing the social and economic values of wildlife, a first point is that the values fundamentally involved are neither social nor economic. In wild nature there is neither culture nor economy, not in the senses these words carry in human society. Yet wildlife can provide, derivatively, both social and economic values. The puzzle is to analyze how this happens. One answer lies along an aesthetic route, first leaving society and economy to appreciate the wild. Subsequently, the route will bring us back home.

SPONTANEITY: MOTION AND EMOTION

Animals can move. The aesthetic experience of wildlife is one of spontaneous form in motion. In the art museum nothing moves; in the picturesque scene little moves. Wildflowers sway in the breeze, but they do not move; they are moved. At the cinema, the play, the symphony, there is movement, but for the most part it is programmed so that the audience response is carefully controlled. There is nothing of that kind in the field. The wild life is organic form in locomotion, on the loose, without designs on the human beholder, indifferent to if not desiring to avoid persons. The animal does not care to come near, sit still, stay long, or please. It performs best at dawn or dusk or in the dark. Yet just that wild autonomy moves us aesthetically.

I catch the animal excitement. Here is prolife motion, and for it I gain an admiring respect, even a reverence. Plants are rooted to the spot, and they too move themselves in autotrophic metabolism, slowly, invisibly to my eye. But the animal must eat and not be eaten; its heterotrophic metabolism forces a never-ceasing hunt through the environment, an ever-alert hiding from its predators. If, as a carnivore, its food moves as well as itself, so much greater the excitement. This requires sometimes stealth and sometimes speed. Unlike plants, the
animal's resources, though within its habitat, are at a distance and must be sought. Its search is the survival game, with all animal motions closely coupled to it. I take aesthetic delight, as an observer, in animal motion, in reaching to participate in a defended life. In all neural forms, human emotions are attracted by animal bodily motions and drawn through these into animal emotions. I rejoice in the stimulus of spontaneous life.

There is grace in the overtones. In a strange, fortunate mixing of the aesthetic with the pragmatic for which we have no adequate theory, the solving of these problems of motion routinely yields symmetrical dynamics of rhythmic beauty—the gazelle on the run, the eagle in flight, the slithering blacksnake, the streamlined fish, the nimble chipmunk. Even when this grace seems to fail—in the lumbering moose calf or the fledgling fallen from the nest—the aesthetic experience remains. Here is motion in the active, not the passive, voice, clamoring for life. Even the potential for motion, when the animal is motionless, perched, resting, hidden, has as much aesthetic value as does actual motion. Wild lives move themselves, and they move us.

Excitement lies both in surprise and in the anticipated. A principal difference between scenery and wildlife is that the observer knows that the mountain or the cascades will be there, but what about the redtail hawk perched in the cottonwood, the fox running across the meadow, the grouse flushed at the creek? The latter involve probability, improbability, contingency, which add adventurous openness to the scene. The watcher can return to linger over the landscape, but not—with more or less uncertainty—over the bull elk that just stepped from cover. See him now or perhaps not at all. The scenes are frameless; one can stretch or shrink at will what properties of symmetry, form, or color to savor, now or after lunch. But the animal on the run and the bird in flight demand an intense focus: they constrain the observer's appreciation to the moment—catch as catch can—postponing reflection until later.

Time counts, not just space; time brings to the animal freedom in space, and aesthetic experience of that freedom must delight in the spontaneity. Through binoculars, one isolates that redpoll right now—Quick!—picking seed from that dried sunflower, there below the clump of tumbleweed caught in the fence, here on a Nebraska roadside, on this wintry February day. "Did you see him when he turned just before he flew, almost the last of the flock? How the red cap and black chin flashed when the sun broke out! Had we come ten minutes earlier, or later, nothing!"

The creeks and cliffs, the forests and open space, the turns of the trail are on the map, although only sketchily drawn because the map never portrays the particularity of a place. But the wildlife encounters
are entirely off the map. They need proper habitat, of course, but habitat is necessary, not sufficient, for encounter. One vacationer had hoped for six days of the Yellowstone trip to see a bear and, on the last day, spied one, only a cub, but a bear nevertheless, feeding in the Shepherdia bushes. The traveler never expected the coyote; it walked by the car, just outside, taking the onlooker by such surprise that she could not get the camera from the back seat. We are likely to highlight the surprises, hoped for or not, and to take for granted the certainties of the trip. Even places to which we later return remain haunted with events of the past "Here, at the mouth of this hollow, a decade ago, I met the bobcat, so intent on chasing the ground squirrel that he almost ran over me. Once upon a time, but no more." And if we do not find wildlife at all? They do not have to be seen; there is a thrill in knowing they are present and hiding.

This immediacy explains why television wildlife programs and wildlife art and photography are poor substitutes for the real thing. The surprise is gone. This explains why zoos do little to preserve wildlife aesthetically. Their motion has been captured; a caged bobcat is aesthetically a bobcat no more. This explains why domestic pets can never be an aesthetic substitute for wild lives. The motion has been tamed; no dog is the equal of a coyote; a thousand housecats are less than a cougar. This explains why the rural landscape offers a different and in this respect poorer pleasure than does the wilderness or the wildlife refuge. Whatever its superiority as a food animal, a cow is never as exciting as a deer. The pariah species, which prosper as parasites and outcasts of civilization, lose their glory. We are disappointed when the bird on the telephone wire is a pigeon and not a kestrel, when the flutter in the bush is an English sparrow, not a warbler.

Now we understand why, contrary to good farming practices, the farmer ought to leave the fencerows overgrown and why, contrary to the economics of agribusiness, there ought be small fields with woodlots and edging. Those habitats enrich the landscape with action. A walk across the fields is twice as exciting if there are rabbits and bobwhites, ten times as exciting with a fox or a great horned owl. Wild lives raise the excitement level; the untrammeled quality of their lives raises the quality of human life.

SENTIENCE: KINDRED AND ALIEN

Not only do wildlife move, but they have eyes. They call. In higher animal life, unlike vegetable life, somebody is there behind the fur and feathers, a center of experience amid the moved excitement. So we move from locomotion to perception, a necessary connection both biologically
and aesthetically. With this move comes the appreciation and challenge of kindred and alien life. There is intrusion, intimacy, otherness. The mountains and rivers are objects, even the pines and oaks live without sentience; but the squirrels and the antelope are subjects. When perceiving an item in the geomorphology or the flora I see an "it" But with the fauna, especially the vertebrate, brained fauna, I meet a "thou." I see them; they also see me. I eavesdrop; they may flee. A hiker may spook a bighorn, but no one can spook a columbine. The aesthetic experience differs because of reciprocity. There is a window into which we can look and from which someone looks out. Wildlife have, so to speak, points of view. There is fire in those eyes.

The window is sometimes clear, sometimes translucent, sometimes opaque. The bear is hungry. The deer is thirsty. The chipmunk scratches an itch; the mallard pair dozes in the sun; the bull elk scans the meadow, becomes uneasy, and edges back toward cover. The jay defends its territory; the plover deceives the predator with its "broken wing," simulates the injury long enough to lead the intruder from its nest, then flies out of sight and detours back. Humans know analogues for these experiences and so share a kinship that cannot arise with aesthetic contemplation of flowers or scenery. But there is never identity, and humans can only imagine what it must be like to be a duck, a chipmunk, an elk, a plover. There is alien subjectivity that stands against human subjectivity, mysterious others with differences both of degree and kind. The natural kinds provide their own categories, which humans appreciate, now at a further level of uncertainty.

But that again adds to, rather than subtracts from, the excitement. Their lives are indeed wild, not only beyond complete human management in their spontaneity but beyond complete human sympathy with their sentience. They have subtleties of cognition and decision that humans do not, as when by echolocation a bat recognizes its own sonar and sees a mosquito with it, in a sky filled with others of its kind. But further, humans have ranges of cognition and decision that bats do not: I can aesthetically enjoy the bats in flight but they cannot enjoy me. This is not a matter of appreciating them by reduction from my own experience to something simpler but of reaching for competence and virtuosity not my own. One form of life seeks to understand another, and this transvaluing brings aesthetic richness and creativity.

In the positing of such kinship, should we say that these aesthetic experiences are not only of wildlife but that there are analogues in wildlife, at least kinesthetic precursors of our aesthetic experiences? We may be reluctant to suppose that these beasts know their own beauty. Humans can admire the coyote's lope; the coyote can enjoy a run but perhaps not admire its own dynamic form. Humans admire the pheasant's
iridescent color; the coyote sees only a meal, yet one with taste. But these wild lives do know preferences satisfied. Are we to suppose no sensuous delight in the coyote's warming itself in the spring sun, no plaintive loneliness or affection in the howl? The pups play to learn to kill; their games simulate the survival game. But the pups play because they enjoy it—as surely as the dog enjoys chasing the stick that its master has thrown for it to fetch. The animal has no more guarantee of success in its hunt than I have in my hunt for it, and when it succeeds, it knows its own form of delight.

Guided by perception and drawn by desire, the wild animal can enjoy its freedom and pleasures. The frustration of the caged raccoon is evidence of that. The peahen delights in the tail of the peacock or else the display would have no survival value. A mockingbird sings to defend its territory in a suburban backyard, but the homeowner who has heard it sing all day and half the night becomes irritated at the song that earlier delighted and wonders at length if the song is not an end in itself, whatever its instrumentality and function. Perhaps a mockingbird even enjoys what it can do with its tail!

The inaccessibility of such subjectivity troubles scientists but augments aesthetic experience. Aesthetic experience runs ahead of cognition. For much of this century psychologists have belittled introspection and inwardness, eliminating these even from human science, much less from animal science. So it is not surprising that science provides limited insight into what these kinesthetic, preaesthetic experiences in animal awareness are like. It is hard to admit as real in the brutes what is hardly admitted as real in humans. Still, a richer science ought to complement aesthetics. Experience is as real as taxonomy, as real as behavior. The ewe who submits to the dominant ram perhaps senses the power in his muscle and horn; that she does is supported by the natural selection theory that requires survival power in his imposing strength. Her appreciation of this is an advantage to her. In her own way, she may catch as much of the "spirit" of the handsome bighorn as does the human admirer. Perhaps the female coyote admires the lope of the handsome male after all, in her own way. How much of this appreciation the ewe and the bitch can bring explicitly into consciousness and how much remains in tacit psychology and behavior are secondary questions; aesthetic experiences in humans too are not less real because they are subliminal.

Perhaps lovers of wildlife have long known what hardnosed, reductionist, behaviorist biologists have chosen to ignore—that there is experience in the wild and that experiences of the wild catch enough of that kindred yet alien vitality, consciousness, achievement, and joy to treasure its presence. If we could acknowledge the deepest impulses of
zoology, these ought to include *anima*, wild spirit (Latin: soul), caught by appropriate human sensitivity to it, and we could let this guide and criticize the human intellectual and empirical experiences of wildlife.

Animals do not, perhaps, make aesthetic judgments, but they have aesthetic sensibilities, perhaps in some less elevated, more affective sense than we formerly counted aesthetic. Animals have no experience of beauty, we may say, though they have the experience of pleasure. But is not a delight in sensuous pleasure, in power, form, and motion aesthetic? What else is the human delight in being bodily outdoors in the spaciousness, the warmth, the sounds, the motions, the smells of a spring morning?

A good deal of argument and even passion has been spent in this century defending sensuous pleasures as a good thing, against a heritage thought too puritan, prudish, too rational, metaphysical, too insistent on the higher pleasures. Even the psychologists, while ignoring experience, have paradoxically defended affect, appetite, desires, and their fulfillment. But if humans value sensuous beauty that they themselves perceive, it seems arbitrary for them to deny feeling and its value in their wild neighbors. What they feel is real and important, and it stretches and enriches the human aesthetic life to contact the animal kinesthetic life. They care, and we should care.

**STRUGGLE: IDEAL AND SEAL**

Behind the motion and sentience is struggle. The animal freedom brings with it the possibility of success and failure in transcending its environment. The scenery cannot fail because nothing is attempted; but living things can be better or worse examples of their kind, they have prime seasons and plain ones, and we have to evaluate achievement. Looking over the herd of elk, we spot the bull with the biggest rack. An adult bald eagle excites us more than an immature one. The big bull does not have more merit than the yearling, but it does have more strength and wisdom of its kind; the adult eagle better exemplifies the glory of its species. Each is a more commanding token of its type. Each has made the ideal real.

The critic will complain against admirers of wildlife that they overlook as much as they see. The bison are shaggy, shedding, and dirty. That hawk has lost several flight feathers; that marmot is diseased and scarred. The elk look like the tag end of a rough winter. A half dozen juvenile eagles starve for every one that reaches maturity. Every wild life is marred by the rips and tears of time and eventually destroyed by them. But none of the losers and seldom even the blemished show up on the covers of *National Wildlife* or in the Audubon guides. Doesn't the
aesthetician repair nature before admiring it? Can we pick the quality out of the quantity, praise the rare ideals and discard the rest, which are statistically more real? Benedetto Croce claimed "that nature is beautiful only for him who contemplates her with the eye of the artist; . . . that a natural beauty which an artist would not to some extent correct, not exist" (1959:99). Oscar Wilde agreed: "My own experience is that the more we study Art, the less we care for Nature. What Art reveals to us is Nature's lack of design, her curious crudities, her extraordinary monotony, her absolutely unfinished condition. Nature has good intentions . . . but she cannot carry them out" (1935:7). Wildlife artists select the accidental best and discard the rest, broken by accidents.

But the matter is not as simple when we couple aesthetics with genetics and evolutionary ecology. The aesthetician sees that ideal toward which a wild life is striving and which is rarely reached in nature. The observer zooms in with a scope on the full-curl rain, or the artist paints warblers ornamented in their breeding prime and perfection. In the language of the geneticists, the artist portrays and the admirer enjoys that phenotype producable by the normal genotype in a congenial environment. Or, borrowing from the computer scientists, the artist executes (and the admirer delights in) the program built into a life, although that ideal has only partly been executed in nature, owing to environmental constraints. Such an ideal is, in a way, still nature's project. In a distinction going back to Aristotle, it is true to the poetry of a thing, though not true to its history, and yet the poetry directs its history (Poetica 1947:1451b). The form, though not wholly executed, is as natural as is the matter. Some will insist that all this is not true to the plain facts of nature; others will realize that this is not so much fiction as a way of getting at what one might call a natural essence only partly expressed in any individual existence.

Nor do we aesthetically appreciate only success or the ideal. The admirer of wildlife can enjoy the conflict and resolution in the concrete particular expression of an individual life. The weatherbeaten elk are not ugly, not unless endurance is incompetence; nor is the spike ram displeasing, not unless potential is uninspiring. The warblers in spring are indeed in prime dress, but the warblers in fall plumage are equally fitted to their environment, neither less ideal, less real, nor less beautiful, only requiring more subtlety to appreciate, now that the expenditure of energy and motion is not in color and reproduction but in camouflage and survival toward winter. Contrary to Croce and Wilde, none of this is crudity, monotony, unfinished imperfection, to be rectified by the human artist. Rather, if we take the natural kind on its own terms and in its own ecosystem, "intentions" coded in the animal nature are
carried out in the struggle for life, and this is heroic and exciting even in its failures. The struggle between ideal and real adds to the aesthetic experience.

The more we know the more there is to see, and the more we see, the more there is to be admired. Now, greater cognitive understanding leads to greater aesthetic sensitivity, and seeing becomes both wisdom and art.

**SYMBOL: WILDLIFE IN CULTURE**

Aesthetic experience of wildlife begins with what such life is in itself—spontaneous, sentient, struggling. After this, wild lives can become symbols of characteristics we value in our human lives. They carry associations that enrich the cultures we superimpose on landscapes. The bald eagle perches on top of American flagpoles and is portrayed in the seal behind the president, expressing freedom, power, grace, lofty alertness. The British prefer the lion; the Russians the bear. States have chosen their animals: Colorado has selected the bighorn sheep—stately, powerful, nimble, free, loving the hills; Tennessee has chosen the raccoon, Kansas the buffalo, Oregon the beaver. Utah is the beehive state, busy and hardworking. The names of sports teams are often those of animals—the Wolf Pack, Panthers, Falcons, Gators, Razorbacks, Rams. We call our automobiles cougars, skylarks, rabbits. Humans abstract, as in all art, the qualities they wish to express, intensifying (sometimes even imagining) the real to make of it an ideal. We elevate into symbolism something of the competence, the integrity, the character of the wild life.

Nor are these simply symbols of strength, agility, and cleverness. Wild lives as easily becomes images of grace and beauty. They decorate and lighten our homes. We enjoy an Audubon calendar on the kitchen wall, or we pattern the curtains with butterflies, or we steal feathers for fashionable hats. The birds are colorful; they can sing and fly; and we wish that human life were like that too.

Perhaps at times we are not really using any analogues of these wild lives in our human lives. Even so, such creatures add a freshness and a flash to culture for what they are in themselves, regardless of whether humans in culture are metaphorically similar. Still, this flair, beauty, and activity express qualities that penetrate the background of culture. We want a yard with cardinals and squirrels; we want picnics, hikes, vacations where wild lives play around us; we pause to admire the geese overhead in flight or welcome the swallows as they return in spring. We regret that the river through town is polluted and dead; the city is poorer because the fish with their jump and sparkle can be found there.
no more. Wild lives elevate the quality of human life with the vitality they express; their presence in culture reveals and symbolizes the sensitivity of that culture, even when no particular human virtues correspond to the animal achievements. So the alligator enters the Florida life-style, even though Floridians make no anthropomorphic use of its competence in the swamps.

Wild lives diversify cultures. A culture is more aesthetically appealing if it includes not only artifacts but also fauna and flora. A painting on an executive's office wall is as likely to show a stag or a hunt as the factory or a granddaughter. Wild lives are part of our environmental quality, the most threatened part. Especially in a culture that increasingly tends toward sameness, diversity in wild lives will be something that our grandchildren will be glad we left them or will complain that we took away. Preservation of the grizzly in the Yellowstone ecosystem is a challenge to human integrity because it calls us to discipline ourselves for quality over quantity of human society. Our children will be ashamed if we lose the grizzly, just as we are ashamed for what our fathers did to the passenger pigeon. Americans are proud of the Endangered Species Act; Du Pont employees feel that what the company has done to Delaware is redeemed somewhat with the company's annual $50,000 grants to the Patuxent Wildlife Refuge, which contains some of the few bald eagle nesting sites in the eastern states. What a culture does to its wildlife reveals the character of that culture, as surely as what it does to its blacks, poor, women, handicapped, and powerless.

Wild lives mix with the ethos of a place, when culture is superimposed on nature. In the culture some of the nature that coexists with it shows through. The new, cultured environment is built over the old, spontaneous natural one, and yet the natural world retains enough power to evoke the admiring care of the cultured human world, which values it for its expressive and associative qualities. Wild lives give what our too readily mobile, rootless culture especially needs, an attachment to landscape, locale, habitat, place. We name a street Mockingbird Lane, or we consider a summer home more romantic if it lies in Fox Hollow, and such places are more exciting if they still have mockingbirds and foxes around. Although wildlife has its social values, these values spin off from values intrinsic to the animals themselves because they make symbolic use of them.

After seeing the mating dance of the woodcock, Aldo Leopold concluded, "The woodcock is a living refutation of the theory that the utility of a game bird is to serve as a target, or to pose gracefully on a slice of toast. No one would rather hunt woodcock in October than I, but since learning of the sky dance I find myself calling one or two birds enough. I must be sure that, come April, there will be no dearth
of dancers in the sunset sky" (1969:34). Grouse or warblers, buffalo or beat, rabbits or deer—animal lives enrich culture with the age-old dance of life. As much as fine art, theatre, or literature, they are poetry in motion. Our society and economy are surely rich enough that we can afford to keep them; they are not so rich that we can afford to lose them.

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