

Control, Chaos, Ecology

robert wolff

The older I get, the less I understand what we like to call "civilization," which gets more and more un-civil, cruel, and crude. I've read that all civilizations we have records of crashed because they had destroyed the environment on which they relied for food, fuel, and shelter. Probably humans, our species, homo sapiens as we call ourselves, are a planetary disease. And so, the older I get, the more I live in my own little world that is as much like the aboriginal world as I can make it. I live each day as a new day, and the last day. I marvel and cherish all aspects of Nature. I try to ignore the house of cards we call the World with its truly idiotic politics, its hatreds, prejudices, religions.

Control

In the age of news, we know more about what happens (or, what other people say happens) in countries we had never heard of a few years ago, than about our own environment. Many of us forget to pay attention to what is in our own lives—what is happening in our own environment. I find what is around me fascinating and it continues to add to my knowledge of who we, humans, really are.

For instance, why I am fascinated by chickens. I feel no particular affinity to the species, or to individual chickens, but they are amazingly like us. I am not studying them scientifically, in numbers, just observing, as I am observing my own kind. They, like we, are not herd animals, although we like being with each other in small groups. They, as we, are not carnivorous, although we both gladly eat meat. They normally are not loners, nor are we. Chickens live in the moment, as we used to.

Chickens don't walk straight lines, they go in zigzags. That is also how they eat, they pick at tiny morsels here and there. Ducks are different, they prefer to shovel it in, although, of course, if I scatter the "scratch," they will pick it up piece by piece.

There are two tribes of ducks now. The ones who were here first are Muscovy ducks, the males grown large as a mid-sized dog. Not long ago, five mallards flew in, and evidently like it here. Animals that eat small quantities much of the day, are much like the hunter/gatherers I knew (although they gathered much more than they hunted). The big Muscovy ducks used to eat slugs, but now they don't. They don't forage at all, the males hang out in always the same place, all day long, watching the world go by. The females sit elsewhere, often pretending to sit on eggs, but they don't lay any more. The mallards, however, are busy all day; they wander widely, picking at whatever it is they see edible. Yesterday I watched some chickens look in amazement at these mallards who found things to eat that they, the chickens, obviously had missed. I could see them amazed, following a mallard, pecking where they saw the mallard pecking at something, but what? It seemed such a human thing to do!

The chickens here make very fluid relationships. There is only one rooster that has a harem, three, sometimes four, hens leading the way. Yes, roosters follow, do not lead. The ducks here do not make relationships, not even short ones. When it is that time—and I have not seen any pattern I can recognize, Spring perhaps—they mount one of the females. A strenuous affair: a lot of huffing and puffing on the part of the male, females totally passive. In fact, it looks as if the female—probably half the size and weight of the male—is squashed flat if it is on the ground, under water if it is in the pond. But it must be all right, no female ducks have died from sex. When a female duck sits on a nest and produces a brood (never more than two times a year), at first the new mama will hide the ducklings, and only after a few days, or even a week, she will come out. It is easy to tell when a female has very young ducklings: she will come to the feeding, quickly eat as much food as she can, then rush back to where she has hidden the babies. But, in contrast to chicken mothers, who teach their chicks how and what to eat, duck mamas eat greedily, and leave the ducklings to find their own way in the world, even when they are barely able to walk. No wonder very few ducklings survive. At least half the chicks survive in this almost wild environment, but very few ducklings have survived over the years that I have been here.

We don't provide chicken houses, or fenced areas: chickens and ducks and whatever other animals live here are free to go where and when they please. At night the chickens fly up in the trees and find a branch to sleep on. Hens with small chicks must stay on the ground until the chicks can fly. On the ground is the greatest danger for chicks at night, but hens are fierce fighters. For ducklings danger comes from above, when they sleep floating on the pond. I have not seen little ducklings

use their wings at all until they are almost full grown. Even very young chicks exercise their tiny wings to gain extra speed when they run. Ducklings don't fly, in fact they have no feathers when they are born, but a sort of fuzz that looks and feels like very soft angora wool.

The two big Muscovy males are amazingly clumsy. They don't walk very fast, if they really need to, they walk/fly, flapping their large wings while hopping on their big flat feet. They are probably too big to fly now. The females, half their size, fly, but not very far. The mallards fly with grace. All chickens here fly very well, fairly long distances.

All the birds rest during the hottest hours of the day, but the rest of the day they look very busy. When it rains—and this is a very wet part of the island—the poor chickens look miserable. They probably are! Duck feathers must be better protection from rain, ducks don't seem to mind getting wet at all.

Being able to observe two or three different kinds of birds, and a multitude of wild birds, helps one to see the grand scheme. In a natural setting that we try to keep "wild," as much as possible in a world where civilization intrudes on all sides, it is still possible to see that animals are really not that different from us, when it comes to basics. Eating, sleeping, mating, raising young, those are basic aspects of all beings. What we eat is different, but that we have to eat is universal. And when I think about what we eat, and what chickens, and dogs and cats eat, it is obvious that life eats life. I'm sure that animals that eat off the ground get soil, dirt, in their stomachs, but what nurtures them is (or has been) alive. Grains, seeds, insects, crawling things.

We, humans, in the last fifty years, seem to have drifted away from live food, to processed, manipulated food that is no longer recognizable as having once been alive. Observing animals is a reminder that all their food is, as it has been all through time, organic.

I spent one spring and summer observing animals raising their young. Again, recognizably similar to raising human young. Chicks that have only recently worked themselves out of their shells are not stable yet. They don't move much, shiver at times, and look utterly lost in this big new world. One cannot help feeling protective. The mother hen stays very close to the brood the first hours, does not look for food. That first day and the next few days and nights are probably the most dangerous for chicks. They spend most of their time under the hen's wings. Probably the second day she begins to walk her path, and for several days she will rest frequently, the chicks under her wings. It is not unusual to see a large hen sitting in the middle of a path, not moving away when I come. I know she has fluffed herself up, protecting fragile

chicks. Ducklings are even more vulnerable the first days or weeks of their lives. Mother hens at least show chicks how to eat, and what to eat. She will pick up something, then drop it, all the time clucking a certain sound that the chicks must recognize. She continues to do this "teaching" until all the chicks have learned. Mother ducks don't seem to do that, at least not here. Human babies are as fragile and vulnerable at birth and, of course, need a much longer time to be protected. But the process of protecting is much the same. Mammalian babies apparently have an instinct to suckle; bird babies have an instinct to eat when fed.

One difference that I noticed between animal young and human babies is that nowadays most babies are raised one at a time. The animals I observe are raised in a brood, sometimes only two, but more often more, as many as a dozen chicks grow up together. When grown, what are now hens and roosters, still stay in touch, recognize each other as siblings. (Although they may not be, genetically: a hen may make a nest, lay eggs in it—but other hens also can lay eggs in the same nest.)

I have seen that in indigenous societies also. Babies are often raised in little groups, although a human mother, in our society at least, thinks of "her" baby as belonging to her only. I have lived in societies where babies, children, are not thought to "belong" to the biological mother, or parents. In that society, nursing mothers frequently nurse other than their own babies (even toddlers). From a very young age the children are made to feel part of a village, a group, rather than a mother/father family. In those human societies, children grow up with a strong sense of being loved, being wanted, belonging. Western children don't know that kind of "unconditional" love. In our society, we have to earn love. Love is something that is given and withheld. In most indigenous cultures that I am familiar with, belonging, being wanted and loved, is a given. I think that our ideas about love having to do with sex, liking, love as a commodity that is given and withheld, is very unnatural—as civilization is unnatural.

I discovered that chickens cover a lot of ground. Chickens are not territorial, they don't have an area they defend. They have paths they follow each day. Depending on the path, they might come through the same spot every hour, or once or twice a day. Chicks follow the mother hen's path, of course, and, as their independence grows, they begin to wander off to the sides, making their own paths as a variation of the mother's path. There are great individual differences, from an early age. Some chicks are more independent than others. I thought perhaps roosters-to-be might be more adventurous, but that is not true.

Chicks grow fast, and it is obvious there are stages. I think chicks grow proportionate to how much they eat. If they eat more they grow faster. Is that true for humans? Very possible.

There is an obvious period in a chicken's life when I call them adolescent. Their bones grow faster than their muscles, they look awkward, all legs. Not yet adult, but obviously on the way. It is becoming visible who will be roosters, although very little sign of the colourful plumage and long tail feathers of adult roosters yet. The first sign is always that they suddenly seem to grow taller. Roosters-to-be look the same as the ones who are going to be hens, but their legs are longer. They look like awkward teens on high stilt legs. They don't have the bulk of a rooster, nor the gaudy plumage, but their tail feathers are beginning to grow out and they begin to strut. Roosters here are not more aggressive than hens (the reverse is true) but roosters strut, show off, pretend.

Chickens in a large group are irritable. Also like humans, in large groups they are a mob, loud and scrapping with each other. In chicken culture, roosters have free entry anywhere, at all times. Even a hen with a brood of young chicks will ignore a rooster who eats the food out of the mouths of the chicks, but she will ferociously fight and chase another hen away. If a chicken finds a morsel that is particularly tasty she will cluck a certain way. In seconds the nearest rooster will run to steal it from her. She lets him. Young chickens will run away and sometimes keep food from the rooster. Older hens will drop it and the rooster will carry it away.

In a large group, the roosters stay on the outside, Rooster eat faster, more greedily than hens. He crams as much as he can in his gullet. Hens eat less frantically. Roosters act as if they are constantly fleeing from the enemy, they are paranoid. They are also, obviously, not as smart as hens. Roosters do not learn, hens do.

It is in the large group that individual differences between hens comes out. There are (older, I think) hens with a brood who stay along the back of the area where I feed them, staying calm even in the excitement, seeing to it that the chicks get their share. Other hens abandon their brood and dive into the melee. At every feeding there are chicks left outside, pitifully squeaking. They often look as if they don't know where they are. I've seen boys and girls stand like that at the edge of a play ground. But, strangely (to me), after the food is all gone, the mother hen rounds up her own chicks. It is rare for a small chick to stay lost.

There are orphan chicks, however, but they are older. Usually they are the consequence of the rape of their mother. When a hen with a brood is raped—not common, but it happens—the chicks are abandoned. More often than not, they go on together and do quite well. These bonds continue well into adulthood. There are "families" of hens who travel in groups, who were orphans together. Until they have the urge to make a nest. From then on, they are on their own.

There are very few families that include a rooster. I had heard of rooster "harems," but not here. There are small families of hens that allow a rooster to accompany them for a while, but never for long. There is only one "family" of three hens and two roosters, the roosters almost of equal age—one is slightly larger (older) than the other. The great majority of roosters here are single, although they too travel in sibling pairs and threesomes. There is one very loose group of four roosters who forage together, perhaps siblings who grew up together. They seem cautious friends.

We also have cats here. One cat was raised by my son's family. She was spoiled by the girls, and although she now lives with me, and I don't like to pet, she obviously feels a great need to be petted by humans; The other cats are feral cats, who continue to multiply. By latest count there are now nine. Cats don't make families. A mother cat will nurse her babies, of course, but no longer than absolutely necessary.

Humans? Yes, we make families, but sometimes I think our idea of monogamous marriage "forever," is not a natural arrangement. I cannot escape my observations of indigenous and aboriginal groups where children grow up with other children of all ages. That seems a more viable arrangement than our separating children in age groups, fiercely enforced by schools. It seems healthier—because more natural—to have children grow up at their own pace, in a loose group of children, always in the arms of a loving group of adults.

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As an observer of the natural world in this tiny area of a few acres, I may pretend that I am just observing, but of course that is not true. I am part of the whole that is very porously defined by our fences. This is an ecology of lava rock with a little soil here and there, trees and plants—many of them planted by us, many not native to these islands—and chickens, ducks, cats, the occasional dog, pigs, and a host of smaller animals and beings that I cannot even see. And humans. We humans are certainly also a part of this little bit of nature that we pretend is almost wild. We eat some of the life that is here: lots of bananas and other kinds of fruit, taro and breadfruit. Occasionally we eat a chicken, and

when we have big parties the family makes a huge imu, earth oven, and cooks the meat of one or even two pigs, many chickens, taro, bananas, guavas, and more. We have had as many as a hundred people eat the food from here on occasion.

Generally we are not aware that we are also the controllers of this piece of wild. Modern humans cannot be anything else any more, it seems. We must control, shape, make. We are the ones who put up fences—here very hard work, requiring drilling holes in the lava, cementing poles, stringing the wire fence. And very expensive. We are also the ones who plant trees, a variety of tropical fruit trees. And we are the ones who are supposed to maintain this little preserve, and maintaining is a job that takes hours every day. We buy food for the animals. We try to control how much we feed the animals, because we don't want them to rely on our food but rather eat what they find here.

I grew up a very long time ago in a part of the world where the wild began a few meters from our house. The wild was so close that all kinds of wildlife freely entered our space. And later I spent time with people who lived their entire life in the wild. They were the most joyful people I know. They owned nothing, lived entirely off what they could find, and occasionally hunt. I'm sure they did not live as long as we do (as I have), but they lived with smiles on their faces. Their control was minimal. They did not clear land to grow food, they found food where it grew. They found clearings to put up rickety bamboo shelters. They made fire with stones, cooked sometimes. Perhaps it is because of those experiences that now I am acutely aware of my heavy hand controlling.

Control of nature has become part of who we are. We see nature as background, as scenery. And as resource. We cannot help ourselves, we need to change what we find to conform to our idea of what is beautiful, pleasant, peaceful. And we now have the power to destroy an acre of virgin wild in hours. Because we have come to think that we "own" land, nature, trees, plants, animals. As we also own our children, our wives (are husbands owned?) The wild people I knew were very certain that they could not possibly own nature. We, who think we are the masters of all, are very sloppy owners. If we really own, we must take care of it. We don't. We use a piece of land, we use the oil and coal we get out of the ground, and walk away. Tomorrow another piece of land, another place to mine.

Brief interruption. This morning it rained very hard when I fed the animals. The five mallards did not appear. Just now, several hours later, they came around to my house, let me know they were here. Poor ducks, I thought—no, I did not think: I felt. Went outside and gave

them a handful of scratch. But I learned years ago I cannot feed just the ducks, or just one hen with chicks. When I throw scratch on the ground, I feed whoever is there. A rooster came by, saw the mallards eating. A rooster has free entrance anywhere, so he went for the little heap of food. The mallards, however, do not fear chickens (the big ducks do), so there was a commotion. I "had to" go outside, and . . . The western in me had to control.

I don't "own" this land, I don't own even my little house, but it is owned by my family, my sons. The only function I have is to feed the animals. And keep the place where I live as wild as I can.

Control has become a problem for me. I also know that my sons, and almost all other people who come here, cannot understand what I am making a fuss about. The fuss is because I know that controlling nature is something that needs to be considered, with awareness. I know that if we take responsibility for a chunk of living earth, we are also responsible to keep it alive and well. When I look around me at the larger world, we don't do that. We do not manage the living earth well, because we have forgotten that it is alive, and that it is part of an ecology that we too are part of. Perhaps it is comparable to how we control our bodies. Some of us just live in a body without much awareness, trusting that the body will take care of itself. Others train and shape a body to conform to some idea of what is beautiful or appealing. Most of us are unconscious, unaware, of what a body really is: a miraculous, very complex ecology.

We, humans, think we are utterly different from animals. The more I observe, the more I am struck with how alike we are. I would not be surprised if it were scientifically shown that no animal is cruel, or vicious, by nature. Violence must be trained into animals as well as humans. Restraining is one sure way. Withholding food, reward, attention, is another. Probably crowding is yet another way to make animals vicious.

What do we think imprisonment does to men and women?

We don't think. Out of sight, out of mind. But that is another story, for someone else to write about.

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Almost all the chickens here are black, some just plain black, others with "gold" feathers around the shoulder, looking very much like the short, fur shoulder capes that were in fashion a long time ago. Some hens even have two or three tiers of shoulder capes in graduated colours of gold to brown. Most hens have black legs, a few have lighter collared

legs. There are a few chickens that are lighter, a yellowish brown. All roosters are the same pattern, differing only in how bright the red and gold is. Some roosters look almost black, but they are the same pattern, but very dark.

Last summer an all white hen showed up. Not totally white, she has one or two dark feathers. The legs too are pale. She was exceptionally aggressive, picked fights with other hens. I imagined perhaps her "difference" made her snappy. But how do you prove that? I do not know whether chickens even see colours, although I assume they do, otherwise why the show of roosters? The white chicken had an unusually small brood, three chicks. Two white, one black. They grew, now they are adolescent. The two white are hen and rooster, but always hang out within a few feet of each other. The single black is a rooster who left the family a month or more ago. The first white hen showed up with a new brood. This time two all-white chicks. All of them with one or two black feathers somewhere. The first white hen is now calmed down, not as aggressive although she a strong personality. She does not have to fight, other hens stay out of her way.

The exciting thing about the white chicken is that I had nothing to do with it. For thousands of years, probably, humans have bred animals to their specifications. We changed plants and animals by our knowledge of genetics. Oh, not the theories, but early Man learned that he could move and push natural reproduction to produce a new colour, or shape, or size, or function. Hundreds of different breeds of dog, horse, cow. Even camels have been specialized. Hmm. Control came early!

But then, animals also control! Ants who keep plantations of a kind of louse that produces food for the ants. Are there other animals that control?

I had better define more carefully what I mean by control. I do not mean dominating, or capturing; I do not mean the fences and walls we need to keep others in our out. I do mean actions that intend to change nature, life forms, life itself. Maybe the ants do not intend anything, it is part of their nature. Bulldozing is the kind of controlling that I abhor. So, following my own definition, perhaps it is all right to bribe chickens to stick around to eat our centipedes, but not to fence them in?

Words, words. Humans get easily tangled words. In America that has led to a belief that words are not important, any word can mean anything. I have not found that same looseness elsewhere.

Today I discovered that I need not feel sorry for the mallards. They are so much smaller than the Muscovy ducks, and the first few days they

were shy. But they can take care of themselves, thank you. The big white drake is greedy, probably hungry, he tries to get "more" at all costs. But the mallards get right in there and are not easily pushed around. Only one of the mallards is shy, stands apart. Haven't figured out whether it is an older female, or a male past its prime; she is visibly older. Yet, despite her air of being too good to fight, moping almost, now and then she (if she is a she) puts her chest out and literally barges through a clump of ducks, pushing and shoving; she always breaks up the knot and the others stand back, surprised. I think of this duck as she because she reminds me of an aunt, who had that quality of being shy but tenacious. She did not stay "maiden," with a husband and then a wonderful child.

Walking back I realized that, of course, my making little heaps for the ducks and scattering scratch for the chickens is my way to treat different people differently. I know full well it does not work well. The reality of Nature is that I cannot feed one chicken, or one duck. I feed the fowl. And I found out I cannot get mad at one duck: all animals flee when I even raise my voice. Very disconcerting at first. Evidently they do not see themselves as individuals, not even as chickens and ducks. Or, more likely, I am so alien to chickens and ducks alike that they feel a solidarity as birds.

That reminds me of a time, long ago, when I was administrator of a day-care centre, we took care of very young children, three and older. When a "teacher" would gently scold the three-year-old boy who kept taking other kids' toys away, the other six or seven three year olds would burst out in tears. Humans learn to distinguish between me and others early. And even in a classroom setting, a teacher angry at one student makes all students anxious.

Now I know that, of course, feeding the fowl is interfering in the natural flow of things. It is not my job to decide who can live here and who cannot. I may "like" mallards better than Muscovy ducks, but do I have the right? I cannot "own" an animal, any more than I could own a person. I still stumble when I think "my" children, until I quickly remind myself that in Indonesian (and many other languages) there is no word for "my."

The mallards decided to come here, I did not bring them, entice them, buy them. I must leave well enough alone. If they can find a niche, fine. If they can't they'll fly away. But I think they will be able to maintain themselves here. We began to feed chickens when we wanted them to stay. There were only a few then. At first we even fed them close to the house, so that they would eradicate unpleasant beings like centipedes

and scorpions close to the house; chickens are very effective at doing that.

It's all about control, isn't it?

Humans have worked themselves into the driver's seat (we think). Controlling plants, animals, the earth itself, we set ourselves apart. We against all the rest of creation. From there it is only a step to own land, own the planet. Nature has regularities and what I call "givens." Gravity is a given, a quality of the planet, all planets, all matter perhaps. Life is such a given—I am convinced that Life is part of What Is, not something added to matter. How can it be separate? But then, how can we think ourselves separate?

We certainly do feel ourselves separate, and controlling. I know that we humans did not always think ourselves apart. To the contrary, for eons we must have known ourselves part of the earth and all beings. All my relations, as Native Americans say. All and everything that I have connections to, and they to me. We have imagined a whole world (meaning our man-made world) on the basis of that separation. That is why it is so difficult for us, modern humans, to remember what it felt like to know ourselves part of everything. Maybe a little control: we could use animal skins for protection against the cold, we could make a shelter of bamboo that grows all around, and palm leaves to keep the rain out.

We, humans of today, know that we have the power to change Nature to meet our wants as well as our needs. Before, what made humans unique was our ability to adapt to many different circumstances, different aspects of one Nature. Humans learned to live on ice as well as in deserts, we learned to live at 20,000 feet altitude as well as on atolls rising less than ten feet above sea level. Today we can no longer imagine adjusting to anything—we adjust everything around us. We can no longer live in the tropics without air conditioners in our homes, cars, offices, stores. We can no longer live in places of snow and ice without artificial heat. We use more energy to be somewhere than it took to get there. We used to eat what grew around us, now we eat what pleases our palates: strawberries all year 'round. We cannot imagine doing without the energy consuming machines we rely on to live a life style that is the biggest, most wasteful footprint of any species this planet has ever had. Until, I am certain, one day in the not all that far future, we'll wake up to the fact that it is we who must adapt again. Our life style is not sustainable.

You don't believe me; you don't agree. I know you think that. There must be a way, you say, to live as we do now, and—And what? I no

longer know what "western" culture is. I know that American culture is moving rapidly toward a world (man-made) for the few, where the many are slaves, insignificant serfs. Perhaps other parts of "the West" are still organizing themselves to share and share alike.

Back to control. I recognize control in myself. Cutting grass seems unavoidable; how else could I live here? If I did not control plant life, vines would invade my house, I would not be able to go from here to there. Animals make paths, we humans used to make paths. Now we make roads so that cars can move us in comfort from here to there and back. But paths do fine, and are much more pleasant to walk on than the roads. And paths do not need to be as tightly controlled as we think lawns need to be cut. Who invented "lawns?" The British, probably.

Control of Nature must be tempered, moderated. A little bit goes a long way.

The small area in front of my porch is not a lawn, I wanted it in ground cover. First, it was broken lava rock. We covered and smoothed that somewhat with gravel. Then a thin layer of soil (brought in the back of a small pickup) on top of fine gravel on top of lava. I planted two kinds of ground cover, one that has a little pink flower, and another kind that has a yellow flower. The pink-flowering plant has been entirely displaced by the yellow flowers. The yellow plant grows fast and furious up to and beyond the edge of my "lawn." When it cannot grow along the ground, it reaches up, gets into the large pots that I have there. I must "maintain" my lawn regularly, yank out grasses and other unwanted (shame on me). I think now I shall . . . No, no more ideas to change this or that, pull out, plant, control. If a plant wants to grow there, I'll let it be. Moderate my urge to control.

As I write this, I look out on a few trees, and on one of the trees is an orchid that I am particularly fond of. It grows a cluster of red flowers, maybe four or five times a year. A special kind of red. Only today I realize why I have always had a special feeling for orchids. Not because their flowers are sometimes stunning. A memory itches in my head. Again I hear him say, "Orchids are special because they are temperamental. They have their own mind." Only now I understand what he meant all those years ago. Orchids resist human control. How true, how true. Over the years I have bought many orchid plants, always as tiny plants with some dry roots. I know only too well that they do not always like where I stick them. When one does particularly well, as the red one, then I give praise, and thanks. Then I feel I have worked with, cooperated with, a moody plant. Thank you, red orchid, I am happy that

we are friends. After all, we live in the same space, close together. Of one family, one huge ecology.

Chaos

Never fear chaos: it is the womb of infinite possibilities. That was the last thing I said in an interview I did a month ago.

Chaos is all around us; we call it Nature. The chickens and ducks need controlling, I thought. Nature needs controlling for modern humans to feel in control, thinking our control is safer—which means more predictable—than the chaos we do not control in neat straight lines. But is it? Are we really smarter than Nature? I feed two cats. It is more convenient for me to feed the cats at the same time that I also feed the chickens away from here, because if there are chickens around when the cats eat, the chickens will hang around, try to get even one piece of cat food. I don't like the idea of chickens eating chicken (part of cat food). But one of the cats refuses to be bound by my time schedule. He comes when he is hungry, when it is not raining, when he happens to be in the neighbourhood. I get mad at him, but of course it is really my problem, not his. People tell me that cats never over-eat, just keep a dish of cat food out, and the cats will eat what and when they need to. That may be true if there are no chickens around. Chickens eat anything, including their own rotten eggs, I discovered.

Controlling is a full time job, and I now realize it is not my job at all. I am a nurturer, I like to feel useful by feeding people and other animals and plants. I know full well that, if I don't, the animals would find food somewhere else—but it would be painful for them, at least for a while. So my need to nurture ends up to be my need for company. I can accept that, but then I must also accept the consequences, dealing with a mob of chickens and wilful cats. Am trying to control as little as possible, and instead go with the flow, admiring the chaos of nature that is so obvious here (anywhere I have ever been, of course). I truly love the Wild. It is alive, unpredictable, and yet there are patterns and it is not difficult to learn to be in.

Developers and land owners do not like chaos. They have their reasons for controlling nature: money. That was very obvious the last few years when suddenly this side of the island was "discovered." Speculators and others came by the plane load. Land was bought and sold again so fast that the price of land shot up from \$17,000 an acre to \$145,000 an acre in two or three years (now, a year later, it is back to \$45,000). Other speculators built houses. The cheapest way to build is to first denude

the acre of all green—and it is quite a jungle here even though there is not much soil. Then, on a naked piece of rock, you build a house and other necessities, a driveway, a water tank, a cesspool. The house sells for \$300,000 (house and land here used to be less than a hundred). When the bubble burst, as we all knew it would, sooner or later, our neighbourhood is left with a row of ugly western style houses on totally empty lots, not a blade of grass. "For sale," empty. The land destroyed.

Nobody questions this fashion of clear-cutting. Before our local money surge, people cleared just enough for a driveway and a house, preferably in such a way that the house would be hidden from the road. What made us accept so silently a whole new way of using this land?

We have learned quickly and thoroughly to destroy, but we forgot how to sustain. Destroying is easy, the easiest thing there is. Sustainable requires a whole other mind set. Sustaining may be the hardest thing for us to relearn, because it means controlling ourselves rather than controlling nature. Freedom, Liberty, I hear the voices yell; free as a bird. Have we forgotten that birds are no more free than the tree they rest on. The bird has enemies in the air and enemies on the ground, yet she must rest now and then, sleep perhaps; make a nest on the ground or in a tree. And, in addition to visible enemies, birds have the same enemies we have, bacteria and viruses.

Freedom is a word. I want the freedom to choose where to live, who to marry, how many children I want, or can afford to have. I want to be free to say you are wrong, if I think so: and free to admit that I am wrong. Yep. What if you choose to live where there is no work, or if the one you choose to marry is not available? You want three children, two boys and a girl, and you get one girl. Freedom to say what you mean? Yes, that is a precious gift, but must always be tempered by the awareness that I must live with my neighbours. If I make enemies with my free tongue I must live with it, and that may be a hostile environment. No thank you, I'll control my tongue.

Looking back over a long lifetime I sometimes ponder: "I wish I had known who I was earlier." In fact, I always knew perhaps, but my parents had another idea of who they thought I should be. Then a family of my own made demands—if nothing else for an ample way of living that I had to earn. Most of the choices I made with awareness, I knew that "under the circumstances at the time," I had to choose this or that path, and almost always I chose with awareness. In these excursions into my past, sooner or later I always understand, again, that the choices I made yesterday made me who I am today. On the whole, I am content with that.

Freedom? That, I now know, is not an option. Freedom exists in dreams only, not in the wild. What we call tree rings shows all the mishaps, cold summers, long winters, storms and fire, that went into making the tree what it is today. We have no easy way to count the years—not important, of course—but our past etches lines in our faces, leaches colour out of our hair, and sometimes soothes the soul.

Freedom is a word that does not have much meaning after all.

Howls of protest! Democracy, women's liberation, slavery, the "right" to. Have we ever considered that those words apply only to us, humans? Is your pet free? Do you have the right to castrate a dog? Control your garden? Use the land any way you want, you "own" it? As if we are separate from the land, animals, plants. We are not separate. We are not better than. We are part of, equal part of the chaos we call nature. Until we can wrap ourselves in What Is again, we will have tyrants and wars and torture and destruction of the planet, our only home.)

And there are the world movers. People who claw up to where they have a view of a larger world and then act as if they saw only what they saw when they were down below. The top of the pyramid pushes and shoves this way and that, making policies, laws, wars. Looking back into history, it is not hard to see that even world movers are in a current that already existed: we were moving that way anyway. There is an ebb and flow in these currents. Whole generations of people swerve this way and that. We like to think that we, humans, made those currents. Look again. Whatever it was that moved us, we all moved together. Left, right, free love, neo-conservative. These movements sweep the world.

The world changes. The river must flow. The world movers go or die, or they sell out to people too lazy or too poor to maintain bright ideas. Things get back to where we live—not where big plans are being made. Dead cars and other junk all around the place; what was once a lawn is now sand and weeds. The garage, now an apartment, is leaning into a hole left by a mishap with a big tractor. Or, look at any place where large swatches of land have been "cleared." Nothing grows there any more except what grows on poor soil because when we imagine we just cleared trees and weeds, in fact we destroyed a small ecology. The trees made shade, which encouraged other plants to grow. By scraping the land, as we do here, we scrape away what soil there is, a soil that holds worms and a world of smaller beings that made it possible for plants and trees to grow. It will take a hundred or more years for soil to be slowly made again from fallen leaves and branches, dead animals, small and large. New soil laced with plastic shreds, metal odds and ends, and glass, no doubt.

We have lost touch with the earth, think of it as a possession we can do with what we want. Caring for the earth is trouble, often big trouble (expensive). So we let go and clear another acre, hectare, somewhere else.

Yes, there are exceptions. There are parts of the world where people have lived for a long time and maintained blocks of forest, meadows, streams. It takes caution and continuous care to maintain sustainable. The only way to do that is to have a culture that values paying attention, caring, and values not controlling above all. Living sustainably in the Wild means using what is there, eating what grows, adapting my living to what is available, not wanting more than I can eat, being careful to not waste, and what waste I make must be recycled—as everything in nature cycles through the chaos over and over and over again. That is an entirely different mindset than what we do in our so-called civilization. We do not care what our immediate environment provides, we change nature to conform to some imagination we have of how we want to live. We bring building materials for a house from halfway around the world. Our food is grown elsewhere. We are not only careless about waste, but waste more than the earth can absorb. Modern man has an extremely powerful, large footprint. I don't know whether we are violent, selfish, and crude, because we are so contemptuous of the chaos of nature, or whether we are afraid of nature and wilful and therefore become violent. It is the same. We, homo sapiens, do not act sapient any more. (Sapient is derived from the Latin word *sapientia*, meaning wisdom.)

I recently came across a terrifying statistic: one per cent of Americans are growing the food for the entire nation. We buy food, don't grow it any more. And we have become so alienated from nature that almost all food we buy is sterile, wrapped in plastic, so that we can pretend it comes from a factory, not from a cow, or a chicken, or a plant. Another article told why twenty-five million children under five years old die each year from malnutrition (that works out to 14,000 children dying each and every day). That is not starvation, but not getting the right kind of food for a growing child, not enough of the right vitamins, minerals, and other nutrients. I suspect that our epidemic of obesity is also related to not the right food, rather than only too much junk food, too many calories. Artificial food does not nurture natural people.

Before we became control freaks, boundaries were natural, rivers, a mountain chain, a copse of trees, a few rocks. Making straight line boundaries that look good on a map are ridiculous almost everywhere. Artificial boundaries are as short-sighted as the walls we build. There are no straight lines in nature. Before our civilization got grandiose we

had villages spread as widely as they had to be, with paths or even roads snaking between trees, around rocks, following the meanders of a stream. Our human footprint was almost manageable. No more.

We have become used to a controlled world, straight lines; nature has become the enemy. Plants send out creepers to invade where they are not wanted. Hundreds of species are dubbed weed, which means "not wanted—to be eradicated." We have just about extinguished all animals bigger than us that we could not tame. And still we are afraid of nature, which we think is chaos, in America called anarchy, the big bogeyman. I think Americans truly believe that without someone to tell us how to live we would immediately regress to murdering savages. We might, I don't know. A nation where "everybody" has at least one gun is a danger to itself.

There may still be islands or places in high mountains where people live the old way, in small sustainable villages. They rule themselves, if there is any ruling to be done. The limits they know are Nature's limits, and they are minimal. It may well be that humans who are used to being controlled would fall apart without control. Not my experience, however, the two times that I was in an entirely uncontrolled country for days one time, two, three weeks another time. Life went on, we managed well enough under the circumstances, thank you.

Control is destroying the planet. Control and being controlled is destroying us.

* * *

The interview I mentioned at the beginning of this part took place over the phone. The interviewer, Joanna, was in Spain: I, here on the island called Hawai'i. She has a web site: futureprimitive.org. For 45 minutes I talked about the split I experience between modern life, and the world I experienced with the aborigines 40 years ago. I see our man-made world as an illusion, something that exists in our heads, a package we are making for ourselves in which the earth, nature, and wild animals are an interesting background, resources of course, something removed from what we consider real. But it is exactly the other way around, nature is real and our world is illusion. I use "world" for our man-made world of concrete and cars, oil and politics. I use "nature" or "the planet" for where we really live, what we are part of, whether we know it or not.

It is very difficult to talk about, because I have to be in and use the language of the world when talking about nature. There are no words

for it, as mystics have said through the ages. Words belong to our illusionary world. Animals do not understand words, but they most certainly understand behaviour and intention.

Our illusionary world is in great trouble. By being so divorced from the planet, from nature, we are surprised and cannot quite believe that our illusionary world is destroying nature. Climate change is only one of the manifestations of that change, there are other signs as well. Scientists agree that it is most likely that the lives we have lived for the past hundred or so years is "causing" these changes. In truth, it does not matter much whether the rapid melting of polar ice is the consequence of our greedy burning of fossil fuels, or perhaps a part of a cycle we had not noticed before. Many places on this planet are going to be warmer, they say. The level of the oceans is going up—and many, perhaps most, of the enormous cities of our world are at the current sea level. (I have to be careful how to word these changes: "current level of the oceans"—no longer "sea level," as if that were fixed.)

Ancient people always knew that the planet is in constant flux, a dynamic balance. We now know very well what disturbs a natural balance. Modern agriculture, for instance, agriculture on a grand scale with machines and monoculture (growing one crop on a thousand or more acres or hectares). Monoculture denudes the soil of whatever grew on it, when we grow one kind of tree, one kind of grain. We make neat rows, arrow straight. Machines do all that, machines that use energy we dug from the earth—"ancient sunshine," as Thom Hartmann called it: the energy of the sun absorbed by plants that over many eons became mulch, compressed, and eventually a thick oil, that must be sucked out of the earth, refined for use. The corn, while it is growing, is liberally fertilized with artificial fertilizer, also made from oil, and for good measure doused with chemicals to kill or at least keep away insects and other pests that eat "our" crop. Harvested by still other machines and processed in factories. The land becomes little more than a neutral substance that can no longer grow anything without greater and greater doses of artificial fertilizer and pesticides. Soil that once supported a chaotic mixture of wild plants and animals is dead. This is no secret. We know this all too well, but big corporations continue to practice monoculture. Machines do much of it; saves the cost of labour. But, oh, at what price!

I'll try another way of saying what our way of life is doing to the natural world. The community of chickens and ducks I described earlier, is getting irritable, I observe. Last year I fed them in one place only, a fairly small area. When I felt it was getting crowded I moved the feeding place to where it is now, an area three or more times larger than

the first. And then I added another feeding place, farther away, supposedly for the chickens who live on the other side of a sort of natural hedge, an area of trees and bushes, tightly packed. The quantity of scratch I feed them now is almost twice what it was last year. And again it is getting crowded. Well, yes, of course. That is how any ecology works. At first there were some chickens here, as there are chickens everywhere on this island. We were here; they were here, We discovered how useful they were (they eat centipedes). We entered into the chicken-land equation. The energy in the original situation was balanced, there were as many chickens as this area of land can support. By introducing food, energy (fuel), it was predictable that we would get either fatter chickens, or more chickens. In this semi-wild situation they do not get fat, but now more chickens can be in the same area. The more I feed them, the more chickens will be here. Twice as much food, twice as many chickens.

It is my control that has caused a population explosion. You know those statistics of the human population growth in the last 200 years, A hundred years ago there were one billion humans on this planet, now there are 6.7 billion. We have obviously pumped up our production of food (and energy) to allow such an increase. Equally obviously it is more complicated than that, there are other factors as well—but read this as a simple illustration of a principle: by entering an existing balanced ecology, and feeding (favouring) one element of the total ecology, the entire ecology is affected.

We injected lots of energy into the world ecosystem, energy we get from oil that we got from the earth, and burned into energy. Depleting the earth and using the energy to destroy the earth—almost totally unaware and uncaring what our burning did to the atmosphere which, after all, we share with all life on this planet. Today, although we know full well what is happening in and to our planetary atmosphere, this country, with probably less than four per cent of the world's population, is responsible for at least 25 per cent of the carbon dioxide that is spewed in the air by our oil and coal burning energy factories. We have and are changing the face of the planet. We change the flow of rivers, dry up swamps, move mountains, build endless roads, cover many square miles of land with concrete. When I think of the energy we dig up (or suck up) from the earth, we must give something back. Instead we take more. We take measureless amounts of wood growing in forests, denuding the earth, "desertification" it is called. First thin soil, soon a desert. Original man was very careful to put back about as much as he took, never taking more than he could eat, never eradicating an area of a plant he needed. Ancient man knew he was part of the whole.

We use more of the earth than we give back, more even than we can use. We throw away more than the earth can absorb of our poisonous wastes. We live on credit, but do not even think about how to pay back. By taking infinitely more than we are putting back in, we make the earth poorer (extinction of species). With a great variety of many species an ecology is stable. Simple equation. By impoverishing the whole, we make it more fragile, less able to restore a balance.

What makes a healthy ecology, a healthy earth, or a healthy body, is a chaos of many varieties of life forms, in a dynamic balance. Chaos means we have no control but, let's face it, we do not control very well. Or, it means that we control our environment because we cannot control ourselves. Not very smart!

Yesterday the United Nations issued a very strongly worded warning that global warming, and all its effects, is rapidly approaching a point of no return. We had better organize all our politics to deal with the environment, or we won't have a liveable environment in the not far future. When I read that I thought about governments, at every level making more and more laws, that would require more and more enforcers. More control. I am convinced that does not work. We must accept chaos, stop controlling the environment. What we must learn, we must learn one by one. We must change how we think, what we consider real—our wasteful way of living? Or living as part of the earth? As a body has the capacity to heal itself, an ecology has a way to balance itself. We know lakes that were polluted can be healed. That is done by listening to nature, not fighting it. Usually healing is helped by adding life forms that, for instance, can neutralize a poison. What control is needed is control of people who polluting through careless, unaware living.

Our news, so-called, hardly mentions important issues other than politics. Hard it is to believe that there is anything bigger than politics? How about survival? As a species, I mean—in the real world of nature individual survival, which we think so important, plays almost no role. The aboriginal and indigenous people I knew, or have read about, lived a very different reality. To them, the world around them, the rocks, sand, water, animals, plants, trees, were all one familiar, known whole, of which we were just a tiny insignificant part. Humans, animals, plants, rocks, are related in a rich chaos of natural abundance. Ecologists think that also. What is important is the connections, everything related to everything else. As Native Americans say, All my relations.

Having been raised as a westerner it took me years to experience (again) that feeling of immersion into the environment around me, the

sounds, the rocks, the wildness of plants and animals, the wind, rain, fierce sunshine, dark—I am a part of all of that. I am no different from the trees I love. The same molecules, the same chemicals. I breathe in the oxygen that plants make. Now I can think in terms of the connections, the paths between. The many, the warm, abundant chaos of All There Is.

The hard part is shifting realities. I wish you could share my reality, or, rather, I wish you could see the difference between a natural (for want of a better word) reality and the illusionary reality we live in. The two realities are very clear and dangerously different from where I sit.

In front of me, through the window, the amazing orchid that blooms year 'round, making a new leaf and a new flower about every three months; the clump of flowers a strange kind of red. Through the window it seems a tender kind of red. Not the brazen red of the hibiscus flowers that show behind it in a wilderness of many greens. Nor the lacquered red of anthurium. When I go outside and look at the orchid up close the blooms seem to have an almost invisible, but sensed, veil. The inside of an abalone comes to mind, that shimmering, shifting overlay on the orchid flower. The orchid is very real, I can touch it. I know its history: I bought the plant years ago, when it was small, for a dollar at the market. I stuck it on the bark of the tree, put moss on the roots, an old piece of string holding the moss in place, which moisturized and kept the orchid in place until the roots had attached themselves to the tree, running under the bark for many feet up and down the tree—evidently not interfering with the circulation of the tree. I remember my delight when the first flower stem showed itself, with only a few flowers in a bunch. Now the bunch is bigger, mature.

On the same little laptop that I write on, I also get "the news." With the internet I can choose—we all choose—the news that resonates with my particular beliefs. Wars, bombings, diplomats posturing, horror and terror. I know many "facts" about countries we are warring in, I have seen and continue to see pictures and movies of parts of the world I have flown over, or perhaps even landed on an airfield that is now in the news. But the news is another kind of reality altogether. I do not doubt that these things are truly happening, and I also know that we are told about these wars is coloured, manipulated, censored, minimized, and enlarged according to the whims and programs of those who control that digital reality. It is an almost total man-made reality. I experience news in my imagination, in my head. Knowing the number of dead does nothing to make me feel even one of those deaths.

When I read what Putin has said yesterday (I wrote this in 2007), or where he went, or what he is up to, I know in my mind that that is all

true probably, but it has no experiential reality for me. When people visit here I think they often don't see the rich chaos of trees and animals around, that is less real to them than what they saw on TV last night. People seem to feel a phone call with someone living 6000 miles away as real and personal as the cup of coffee they are drinking; maybe more real. How can that be?

I think of Cindy Sheehan, a woman who personally, deeply, felt the impact of a faraway war when her son died. For a while she became the spokesperson for a growing anti-war sentiment in this country. The horror of war is a reality to her. But to most of us that war is not an experience, We know the numbers and also know that those numbers are almost certainly not the "real" numbers. We are told the convoluted realities of how our troops are doing, or not doing. Some of us have learned some of the geography of where countries are that relate to the war zones. But it is mostly imaginary stuff, it has made very little impact on our lives. Cindy Sheehan had her fifteen minutes of fame, then faded in the background of politics, scandals, murders, and all the news that is not even news any more. Evidently we cannot handle the real reality of Cindy Sheehan, as we cannot deal with the real reality of the environment we are destroying with our way of life.

We have a hard time "believing" in global warming. When we are asked to think about it, and more specifically, to change our lives in order to, maybe, slow the climate change effect, how can we fit it in the realities of our income and expenses, a mortgage payment that is due, our children in school—a school that has changed its mission, now with an emphasis on memorizing facts tested by standardized tests (brrr).

What we call the Media, with a capital M—now used singular although it used to be the plural of medium—the Media is spinning a reality in sound, colour, and life-like movement that has nothing to do with the reality of nature. The names of people in shows are as real to us as our children, maybe more so. Nature has become a screen against which we project our imaginary realities (yes, plural). Nature no longer exists as the reality in which we live, of which we are a part.

Hubris it is called. Arrogance. Imagining ourselves so special, so powerful, that we are the lords of the universe—or, at least of the planet. Our imaginary world is more real than the environment that we live on (no longer "in"). If we feel ourselves a part of something it is of a nation (another illusion), a race (illusion), a political party (ultimate illusion). Some of us love nature because flowers and sunsets are beautiful. We love our pets because we have humanized them.

"Wild" has come to mean out of control.

Until, one day, the reality of war, or sliding into poverty, or sickness without health insurance, hits us, as a son's death hit Cindy Sheehan, where the real reality lives.

I wish I could spare you the shock. but I cannot. The reality of an aerial bombardment does not get to us until we are in one. We are so overfed that we cannot imagine hunger. I assure you, hunger is real. I have been hungry; I weighed half of what I weigh now and I am not fat.

Chaos is real, and always has been. Nature shows clearly that chaos can—must—be a balance, a dynamic balance. A balance that never is quite the same as it was yesterday, but a balance nevertheless.

With our control, our obsession with straight lines, eradicating weeds and "bad" germs, our endless fight to do it our way, we are trying to tame chaos. Folks, it can't be done. That is the real reality.

On this planet, in the real reality, chaos cannot be controlled, only enjoyed for the endless options it allows.

Can you feel the difference between talking with a real, live person sitting next to you on a bench, or talking with someone on a cell phone in another parts of the world? On that tiny machine that I hold against my ear I hear a familiar voice—if the static is not too bad, and if both of our machines are charged—I am talking to a person I imagine in my head. The woman sitting next to me I can touch, smell. The real world is not two dimensional, it is not a flat screen. It is three dimensions, even four and five, that we experience with our bodies, not our brains.

The two-dimensional world of illusion is about to eat us. We have stepped into a never-never land that we pretend to be as real as the coffee pot that is boiling over. But it isn't.

Would wars stop if we did not get news? Who knows. If a tree falls but we are not there, is the tree really falling? That used to be a riddle. Nature, the real reality of this planet, does not care whether we are aware of the tree falling or not. In nature the tree falls, whether we are there or not.

We fear chaos because we are told to fear. We fear "anarchy" (although few of us know the true meaning of that word) because it is a bogeyman, fearsome monster in fiction. We reject socialism—not knowing even the first principle of it—because for half a century it has been presented to us in clever propaganda of business moguls who care more for profit than people. We fear because we are reminded daily to be very afraid. It is rarely explained to us what we should be afraid of, except vague words like "nuclear threat," "cloud over a big city," "we

are at war, after all." Who or what are we at war with? With terror, we are told—not even terrorists. War means aggression, force. War on poverty might mean an aggressive effort (force) to eliminate poverty. Needless to say that war was lost before it even started. A war on terror is equally doomed, certainly when the methods we use are as terrorist as the acts of those 19 men against a building and the people in it.

If, in ancient times, people in a village had feared, they would freeze. Fear softens the muscles and nerves. They would be will-less, cowering victims. In reality, the village people faced a real enemy with courage and open eyes. Closing eyes has never yet saved anyone. The fear we are told to have makes us numbers, accepting whatever our leaders tell us is necessary to win an endless war. Wars are never won, they wear themselves out. That is not wishful thinking, it is our history.

I see our man-made world sliding farther away from a reality based on experience into a reality that exists only in our collective imagination. The wars, the financial system, the growing gap between rich and poor, the talk, it is all illusion and illusion-making.

Not harmless. It is the dreamer who drives his car over the cliff.

The earth, the matrix (another word for mother), is real.

Never fear the chaos of nature, it is the womb of endless possibilities.

Ecology

It is kind of gloomy outside. I've been thinking—oh, I don't mean just now—I think often. What I call thinking is sort of juggling things-I-know to make sense of something I don't know. See how this thought fits into a wild web of something almost approaching a whole. That's how I keep learning. Much of what I call thinking I do outside, when I am gardening, or observing the animals. Or when I look at the clouds to see whether I need to water a few plants. Over the years I learned to pay attention to how an unknown fits into a larger almost-known. Or, pay attention to what is connected to this unknown.

Give you an example. I have wondered, for instance, about our roosters. In Asian countries I have seen cock fights; those roosters were fierce, mean. The roosters here are mellow. They never fight with their spurs, they will fly breast to breast for a few seconds, then walk away. The hens are a lot more aggressive than the roosters. Do the roosters here lack testosterone? Enough, there is a regular wave of new chicks. I have looked on the internet—currently the source of all facts—but have not

found much about the basic nature of male chickens. I do know that in cockfights the owners "massage" their fighting cocks before a fight, blow in their ears, or in the beak, and do other things I probably don't see, to make the beast more fierce. Violence then is a matter of training? And, interestingly, it is Man who thought of training other beasts to be fierce fighters.

Well, yes, that is how we train soldiers. People must learn to kill. That does not come naturally. Some children learn early if they live in a dangerous neighbourhood where fighting is what one does. I grew up in a culture where people did not fight each other: it was considered gross, animal-like. I had to learn to fight when I first attended a "white" school.

I do a lot of "wondering." For instance, for six years now, I have wondered about the reaction of the American people to the horror of 9/11. I was unprepared for the hyper-emotional feelings of being attacked, invaded, hurt by an unknown force, and easily talked into revenge and war. I saw the same movies, over and over again. I saw the planes hitting the buildings, fire, then the buildings almost elegantly crumbling into their own footprint. Even a third building—that was not hit—crumbled the same way. I remember thinking "where are the fighter planes?" Surely a city like New York must have more than one air base near enough to send up fighter planes. And I wondered how the buildings collapsed so neatly. I remembered a movie I saw of a hotel in Las Vegas that was demolished so that they could put up a bigger and better hotel. The man explained how complicated it was to place explosives just so, and activate them in a certain sequence. With the twin towers of the World Trade Center, the impact of a plane, almost full of fuel, did the same thing. And I remembered that the same buildings had been attacked before by some people who had driven a truck loaded with explosives in the underground garage. Those men were captured, tried, and sentenced. I remembered also, not long before, that two American embassies had been attacked in East Africa, and a small boat with explosives had hit a warship in the Persian Gulf a few months earlier. But nobody else seemed to have had the same thoughts, all everyone talked about, on TV and in my neighbourhood, was the deaths, the idea of using a plane to attack (weren't there Kamikaze flyers in the Second World War?). There was a long time when I could not talk with anyone, as if it were un-American to not feel the intense feelings of revenge—kill, kill whoever did this to us (me).

I just finished reading a book that gave me, now at this late date, a little more insight into America's reaction to 9/11. *Small Wonder* by Barbara Kingsolver, a wonderful writer I admire greatly. I could feel her agony,

many feelings actually, some I could not feel, but obviously a great shock. In those essays she talks a lot about the number of deaths—although what we finally learned was that the number of people actually killed in and around the Twin Towers is less than the number of people killed in auto accidents in New York State in one year.

I still wonder other things that I have not heard or read discussed very much. Why the World Trade Center, for instance. If all the purpose of the crazy nineteen had been killing people, as we were told, they could have chosen any of the thousands of high rise apartment buildings. But they chose the WTC, a symbol of how others see America. A nation of trade, a nation that invented globalization, free markets everywhere. A nation that outsourced its manufacturing genius that made it the richest in the world.

I also wondered, and still wonder, what makes people do terrorist things. Our media and our leaders tell us it is because they are religious extremists—but these nineteen were not religious at all, it turns out. Or, we say, "they are mad at us because we are free." They obviously knew how to use the freedom they had and ours. No, that does not answer my wondering at all.

My strange kind of thinking.

* * *

Recently, following a thread, I came upon yet another story bemoaning a failing educational system. I read several of these after school started around Labor Day. My thought about "education" is that schools are designed to be the expression of a culture, they were started to teach young folk what we adults wanted them to know about what we held dear. We (the culture) never hid that school is mandatory. You must go to school. Indian children were kidnapped to be put in schools where we could teach them our language, history, and rules. Today, schools also serve a second function: they keep children busy while both parents are working.

In America, in our so-called pop culture, intellect is not one of those ideals we hold dear. All intelligent Americans (and who isn't?) learned early on to hide how smart they are. That just does not play. The culture says to pay intellect, but not too much—not as much as we pay clever businessmen and, of course, risk takers. So, in a culture that is overtly anti-intellectual, how can we expect an educational system to be other than anti-intellectual? Now, with a new law, schools must see to it that their charges memorize facts, because the culture sees facts as

necessary for surviving in this strange world. (Another one of those wonderings. It seems so obvious, "everyone knows," that surviving must be bought with cleverness—an aspect of intelligence—or muscle.) In real life everybody learns how to do a job by doing it. There probably are fewer facts now that mean much any more in the twenty-first century. Geography? It changes. History? Every generation rewrites history. Math? Yes, parts of it are useful in some jobs, but each job requires a different kind of counting and making statistics, accounts, and plans.

Educators say, frequently, that education is preparing students for jobs. But the generation of teachers lives in a different world than the world that he kids live in, and will live in. The faster a culture changes, the greater the gap between generations.

The article that brought all this up records what the writer and "my friend," who is also a teacher and has been for 40 years, talk about, namely the "dumbing down" of students now (compared to 40 years ago, I presume). They, the author and his friend, blame TV, games played on TVs, computers, and those little gadgets kids live with. Oh, and cell phones. And the music they listen to, and the movies they see, and the internet. The usual.

I too think TV an abomination, junk food for the mind. But it is what's happening, man. I am way too old to understand this world. I don't understand, for instance, how we-the-people have allowed this imaginary world to own us so completely. But, again, that is what is.

In other words, if it is true that kids do not do as well in school as the educators want them to do, does not that mean that there is something wrong with what we teach?

My own idea is that an emphasis on "teaching" is not useful. I was lucky, from the beginning I was in a system that believed that schools were to help kids *learn*. Teachers were trained to stimulate us to find our own way to discover the world. We were rarely asked to memorize a list of things, facts, dates. That came later when I had to pass the final exams—but I was experienced in figuring out the best way for me to memorize.

If schools (and governments) are an expression of the culture—not the other way 'round—then if the culture is dumbed down education is also dumbed down. Modern life is bad for the mind as well as the body.

In my kind of wide thinking, it is not important to consider who started it. Chicken and egg. A process of going on. If you want you can separate numbers, facts, from the process, but for my thinking that does

not add anything. I try to think as I understand nature to think, act, BE. Nobody designed or made a river. Rivers follow natural givens. The word "law" I reserve for the rules we make, not the regularities I rely on in Nature. Gravity is such a given. The spinning of our planet is a given. Probably there are scientists hard at work trying to own gravity, change it, use it. Fire is a given. It has several attributes, always and in all circumstances. It is hot, it gives light, and is hungry for more of itself. I really like all these givens for what they are. I have no need to change any of them, I don't have to memorize anything nor do I have to interpret anything: nature is very good at reminding. I have not the slightest desire or need to "own" any givens, control them. I can't anyway.

I have a great need to think wide. I want to know not just one fact, but how it fits in with other facts. And I tend to jump—just a warning. So, I'm thinking of humans, as a species, as a whole. What, who are we. Westerners assume that our way of life, our values, our culture is the best, the future. We also assume that sooner or later all humans will see the truth and be part of this culture. I've been lucky to have lived in other cultures, so I know this is not the only one. But it is a powerful one that can and does powerfully force non-believers and newcomers into its folds. And, except for some resistance here and there, it seems that really all humans want more food, more clothes, towns, cities, cars, planes, fast foods, and money. The culture of MORE is conquering the world. It is also deeply scarring the planet, and without doubt affecting and effecting many things we must share, like the atmosphere, wind, and temperature; how much sunlight gets through to us here, and what kind of sunlight it is. I can see that. I can also see us, humans, swept up in this tsunami of modern more.

But my wide thinking must include the planet itself. How is the planet taking this? Well, the planet is beginning to give us some feedback, what we call climate change. Maybe leading to a rise of the levels of the ocean; not today, but perhaps tomorrow. Half of all humans nowadays lives in cities, some of them the size of countries. Many of the biggest of the cities lie at current sea level. Is the half of all of us who live in cities safe? Are we happy?

The hugely inflated number of us there are today, as well as what we can "do" with all the energy we are taking from the earth, is making very rapid changes in Life on this planet. It is estimated that half of all mammal species we know will disappear in the not far future. No more polar bears, tigers, elephants, cougars, species of rodents. Birds do not fare much better. These of course are projections, intelligent guesses. In the same category is something I have seen expressed in different

numbers but the same thought, that of the thousands of languages humans know now, less than a hundred will exist at the end of this century.

In other words, humans are cleaning out the planet, getting rid of all the life forms we don't value. We are digging ever deeper to get the "resources" for making energy, scraping and flattening mountains, managing rivers, building buildings. We are getting the planet ready for sole occupancy: humans, and a few animals we need for food, or as pets, a few plants we need for food, or because we like the colour or the smell. We will design the scenery, we will decide who lives and who we can do without.

And will we also keep the whole thing together?

Making a world is a lot of work, and it requires maintenance. We're not doing well about maintenance! We build a road, a bridge, and then go on to the next project. But the road attracts traffic, more traffic that has to cross the bridge that was not quite designed for that much traffic. Oops, we forgot to check. Making a world requires infinite fine tuning. Too bad, not much fine tuning can be done because we got rid of all the millions of species we thought we did not need.

Ecologies are a way to think about a complex system of many kinds of elements, many different connections between the elements, but in such a way that everything is connected to everything. Ecologies are what nature does naturally. There are as many ecologies, or wholes, as I care to look at as systems. A body is an ecology; a family is, a city, a country, the planet. Two things I have learned about ecologies. One is that an ecology, any ecology, exists to continue existing—as life lives to continue life. Ecologies do that by balancing, keeping, maintaining an harmonic balance. Not fixed of course, always changing, but always trying to keep the fluctuations within manageable limits.

Think of the scales blindfolded lady Justice holds in her hand. But not just two balancing each other, but a hundred thousand dishes. Or, think an orchestra, many voices, tones, making a harmony, If one instrument is off, or too loud, or the flautist had to take a breath so that the flue did not sound, the whole is effected. The concert does not sound the same. And if the orchestra is badly out of tune, or uneven, it makes noise.

In an ecology, the more variety there is, the safer the whole is. (The "purpose" of an ecology is to survive). The more species in an ecology, the more stable it is; island ecologies are more fragile than continental ecologies. If the people of Easter Island had lived on a large island, or an island not so isolated, cutting the many trees might not have

destroyed their island ecology. Today, we consider Easter Island as a part of a larger ecology, we have boats and planes to change what was an isolated ecology to being part of a larger one, and therefore more sustainable.

Why then, is Man busy simplifying the ecology of the world? We are busy making the total ecology (the planetary ecology) more fragile. That may not be our intention, but here we are dealing with natural givens, not our man-made laws. A simpler ecology is a more fragile one. Our control does not work when applied to a natural given.

I learned to see the planetary ecosystem. Something like a spider web but infinitely more complex. A third dimensional spider web is hard to imagine; but imagine a four or five dimensional spider web where everything is connected to everything else—and no spider! The multi-dimensional web is a self-contained something like an organism.

Somewhere in our species' history someone began to think of one species, or one individual, as more important than the whole. Perhaps hunters? Hunting big animals, predators, they forgot that predators and prey are intimately connected. If a predator kills more deer than he can eat, the deer population will diminish, and the predator will starve. If we kill predators, we cause an increase in prey: deer populations invade suburbs. In the planetary ecology everything is connected to everything else. A stable ecology—and that means rich, complex, a great variety of species—needs tigers and microbes, owls and mice, sheep and wolves (perhaps occasionally a wolff). The planetary ecology needs all and everyone it can get. The more differences the better. Monoculture is bad agriculture, it destroys the earth. Mono-anything is death. Life is only possible in chaos.

Our culture tells us to distinguish things, things that can be felt, counted, named, categorized. And perhaps we assume that if we add up all these things we get a whole. No. A forest is something more than a bunch of trees. It may be hard to grasp as a oneness, but important for us to relearn at this time. Primitive man always knew the whole: he knew we are part of nature, of All. Indigenous people knew it. Western man has swung all the way to the side of seeing "things." Half a century ago physicists were madly searching for the "smallest indivisible particle" so that then the whole universe could be understood as combinations of those indivisible particles. Today scientists have learned that if you look for the smallest indivisible particle you are going to find an endless number of kinds of them, but it cannot add up to a universe. Now scientists see the whole with mathematics I can no longer follow, but I understand at least part of the new concepts.

I think of it as seeing in two ways, as a reality of things and as a reality of wholes. Two truths. No truth can replace another. Different ways of seeing, two truths. I believe that it is urgent, at this moment in time, to relearn to see the truth of the Whole. The whole of where we live, what we do, where we go: family, friends, animals, and plants that are in our lives. Eventually the truth of the whole of the planet. All those are truths, of course, but the larger truths are harder to put in our heads, harder to "see."

Wholes are not pieces strung together, a forest is not known by the number or kind of trees. A forest is a whole, with trees, and undergrowth, and sun, wind, rain, vines that climb, mushrooms that grow on rotten leaves, bacteria and mice, and a million other life forms and substances and light and air and water that make up an ecology. The forest is a whole.

When I can see the Whole, I know that I am in that whole, inextricably.

As a child, I learned seeing a world of *things*, each thing with a name, a category. And it was assumed that all these things together make a whole. I was very lucky because I also learned, from the people around me, to see wholes. A person was not just an individual, but from a certain village, belonging to a group of other individuals, and the larger truth was more important perhaps than the smaller truth of his or her individuality. Later, very primitive people showed me another truth, seeing the Whole, the large whole of the jungle could be extended to the whole of the planet. The whole I now see when I am outside, among and part of the wild trees, vines, plants, and animals around me, is not the sum of its parts, but it is a Oneness. It is hard to explain in words—words belong to our man-made world.

All Life on the planet is (in, or part of) the planetary ecology: everything is related to everything. The planetary ecology has billions of identifiable things that can be given names—trees, soil, atmosphere, animals of a million kinds and sizes, humans, plants, fungi, bacteria, viruses. The planetary ecology. What all ecologies, small and large, "do" is maintain a balance. In the human organism (a form of a small but not any less complex ecology) the sudden growth of a population of bacteria we call disease, or infection. Our body has a miraculous ability to sense where and what is happening, and "sends" white blood cells to the location of the infection. Not only white blood cells, but what we now call our immune system, which has all kinds of ways to restore a manageable balance. What we call health is an ecology in balance, harmony.

The planetary ecology must, of course, have its version of an immune system—several probably. And so it must be "aware" of the sudden explosion of humans on the planet and the damage they have been able to do in a moment of geological time. Ecologists have called the immune system an "intelligence." There are other intelligences, for instance, the complex process of eating, extracting the nutrients the body needs from food, in the stomach one process, another process in the small and large intestines. A liver that deals with toxins, kidneys that process waste fluids. Or something as simple as "seeing"—not simple at all, of course. It is not our eyes that see, we see in our brains. The eyes are just lenses, adjustable for distance and brightness, passing filtered light waves to centres in the brain where they are interpreted and most of the information is discarded so that we are aware only of what we need (or want) to see. Hearing is not in the ear, but through the ear. The brain is the centre where information from outside the body, as well as inside, is passed through nerves and is processed, sorted, acted upon. We are made aware of only a little of that information. Similar kinds of processes, in magnitudes immensely greater than our simple brains, must be going on in ecologies. If my immune system is a marvel of intelligence then surely the defences of the planetary ecology must have mega-intelligences to deal with imbalances and disturbances. Survival.

I use the word intelligence here not in the sense of being intelligent, but rather a complex dynamic system of responses to stimuli. It does not mean smart. Our immune system makes choices. It can make a number of different kinds of responses, it can make a fever or a chill, a local swelling, it can send more blood to a certain spot where the fight is going on (red and puffy skin), blood can coagulate and thereby close a wound, and immediately, instantaneously, the torn skin begins to grow at a faster than normal rate to close a wound. I am certain that the intelligence of an ecology is equally able to make choices, adaptations of actions, and healing. Our immune system can learn. That does not mean there is a will behind it. The "purpose" of life, and a living ecology is survival. Don't think mechanisms, machines, a computer program. Ecology intelligence is alive, it is an aspect of Life.

What happens when an ecology gets badly out of balance? It falls apart, it does not survive. Deserts used to be vast forests, broken when (probably humans) deforested or perhaps burned them. Forests attract rain clouds, an element in the survival of forests. They break the movement of air, the wind. They temper (absorb) the sun's fiercest bright and hot rays. Deserts are hot in the sun, cold at night; forests allow less extreme temperatures. Deserts are dry, nothing much grows, forests are rich, varied, and stable.

I live on an island that is a huge volcano, parts of it active. On the little area we occupy there is very little soil yet. Ground is lava that is not old enough to have crumbled, but old enough for some plants and trees to have found cracks in the lava; the roots then make other cracks. When the plants die it makes mulch, insects and micro-organisms hasten decay. Some soil forms after a few hundred years. Eventually a tree grow. Trees make shade, other plants like shade. A lava desert is black, very hot during the day. I am seeing every day that in areas of what I call my "garden" (does not look like an English garden at all) where I regularly trim— driveway, a place where I sit, a path— nothing much grows except some grasses, and other kinds of very tough plants. Where I made a pile of grass and things I had pulled up around a Cycad that was swallowed by ferns, almost immediately sprouted a mini-forest of weeds. The next year a tree began to grow. If the pile of old leaves provides enough nutrients the tree will grow strong enough perhaps to find a crack in the lava and grow tall and big. In parts where I don't interfere there are dense clumps of almost jungle. Trees, vines, orchids. One of my sons studied agriculture; he comments that our trees and plants are "much too close." Yes, but they thrive. I think they thrive because we have lots of rain and sun, and what one plant takes out of the ground another puts back in. It is dense and jungle-like because the plants grow close together, and the atmosphere is damp and warm. Lava, when it finally breaks down, is fertile.

If you have ever had an aquarium you know that you cannot just have a fish in water. There has to be a water plant, some rocks, sand, air pumped into the water, the fish needs to be fed. And if you don't scrape the algae that make the water murky, the ecology of tank-water-fish gets out of balance. The fish dies, the water smells rotten. A mini-ecology died.

This is an example of an ecology badly out of balance, a society, or, as the Dutch say, a living-together. The average income of an American family of four is \$50,000 a year, I read a few days ago. The average family lives well, they work hard to live well. That fifty thousand comes to about \$34 spendable income per person per day. The Hyper-Rich in America have incomes from what they own of several thousand times \$34, and that is not counting what they earn. One percent of all Americans own half of the wealth of America (land, houses, cars, businesses, rights, money in the bank). There are many such statistics, all difficult to read because statistics prove what one wants to prove. Seeing an income distribution in a number of countries makes clear that the United States is way on top with an enormous gap between rich and poor. Sweden, among the countries in the list I saw (Google "income

distribution US”) has the smallest gap: the rich earn only twice as much as the poor.

Now to see through an even wider wide-angle lens. Ours is a planet where now one species is not only at the top of the food chain, it owns the food chain. There are 6.7 billion (thousand million) individuals of this species—the population grew like a cancer in the last few hundred years—but still this number is of course a tiny percentage of all life forms on this planet. Yet these few individuals can change, and have changed, the planet. As a consequence of several kinds of thoughtless and ruthless human actions, each day a thousand species are extinguished. Gone. Half of the planet's rain forests have been destroyed. The atmosphere has been fouled. The imbalance in the planetary ecology is . . . what word is there?

What would you do if you were driving a car and saw that you're driving full speed to a chasm? Stop the car, wouldn't you? But we are not convinced yet that we are speeding in the wrong direction. We believe the drivers who assure us that this is the way to go.

WAKE UP, wake up, wake up...

* * *

Back to a tighter lens. There is a process going on that some people call the dumbing down of people and culture, a complex of things happening at the same time, failing educational system, dumber students, a dumber culture, a whole new dimension of learning in cyber space.

This strange idea came into my head.

We, modern man, think ourselves separate from the planet, the earth, the rest of Life. We created a world on top of the planet that tries to ignore or sidestep the laws and regularities of the planet. We "use" the planet. And, somehow, "they" continue to convince us that there is no end to what we can plunder.

We may think we are not a part of Nature, but of course we cannot not be. We can put chemicals and batteries and metal bones into, or attached to, our organic bodies, but the essence of what we are is always that we are part of Nature. We and our works are interwoven in the All of the planet. The one great ecology of the earth must include our plastic and other invented materials, even our invented ideas must be part of the All. Our man-made world cannot be other than a part of the planetary ecology.

Ecologies are constantly adjusting to changes that happen in the whole in order to maintain a sustainable balance. The balance is important. Keeping a dynamic balance is a ground principle of any ecology (or organism). Killing off predators changes the balance in (for us) unexpected (and unwanted) ways. Introducing new species is a tricky experiment, more often than not the introduced species destroys native species or has other effects that we did not foresee. Any messing around with the ecology—one of our favourite pastimes—has consequences, and we have not learned, nor do we seem interested in learning, what these consequences might be.

Regardless of what we, humans, think or do, the planetary ecology has a "need" to maintain a balance, even when Man cuts half of all the rainforests of the planet, even when snow and ice all over the planet is melting from the highest mountains. Where do we get more water where we built cities?

Major imbalances need major responses.

When I have a wound, the body as a whole, the organism that is me, does what it knows to do (and can do) immediately.

What does a family do with a member who is destructive? We tranquilize an unruly child. The planetary intelligence dumbs us down.

What do we do with someone who is asocial, a criminal. We lock him away. Perhaps the planetary intelligence can do that also. As we kill criminals—as a deterrent, we say, so that others won't do what this man did. By now we know only too well that our locking away, even killing, one man rarely deters another. What would the planetary intelligence be able to do to find a new, more harmonic balance? Eradicate Man altogether as one experiment that did not work? Is that what we are doing to ourselves?

Do we, homo once-sapient, have the ability and the stupidity to destroy the planet that we are born of?

Perhaps it is also the planetary intelligence that is beating me to say this. I am much too old to worry about the future; I have used up my future. But I am driven to say: Wake up, people, we are not who and what you think. We are an integral part of All That Is, we are part of the great complex that is our planet. The planet feeds us, gives us shelter, gives us meaning, perhaps grandeur. What do we give back? In an ecology, everything is related to everything. The connection from the planet to us, is also a connection from us to the planet.

Early Man, primitive man, knew that. That is how we survived for at least a hundred and fifty thousand years. It is only in the last perhaps ten thousand years that we have blown our egos up, pretending that we are masters of this planet.

We cannot eat more than is good for us, we cannot destroy what should not be destroyed. A civilization, a culture, that is based on the principle of MORE is truly insane. The smallest child of any surviving primitive tribe knows that WHAT THERE IS IS ALL THERE IS.

* * *

Early this morning, before I was fully awake perhaps, I had this image: a wide, slow-moving river. Deceptive, because underneath the surface there is a powerful current of course. In the river one of those floating mats of debris, tree stumps, vines, plants, and on that mat armies of ants scurrying here and there, fighting each other, fighting other life. The floating mat of stuff changes shape, twirls slowly, all the time moving with the river.

Some particularly smart ants work to steer the floating mat to one or another shore. They succeed to get where the river has eddies, whirlpools pushing water upstream, back to the past.

The mat breaks apart.

When an ecology breaks, like the breakup of the floating mat in the river, there is chaos. Pieces of what was the mat float away. New ecologies grow. This time perhaps without smart ants to steer their world into eddies that flow the wrong way.

And in the end, the one thing that may bring us back to the planet's path is love, a word I distrust because it is so over- and misused. It is quality we had when we were primitive and lived in a sustainable world for those eons. A few peoples have retained that ancient kind of love, in the jungles, deserts, and ice fields of this world. Not "in love," but unconditional love, which simply means accepting that others are as we are, we share faults and talents. Unconditional love has nothing to do with liking another, or approving what others are and do. What it means is that we are aware that we need each other, we are part of each other and part of the great whole. We accept each other as part of a family, the village, none better than another, none worse. Somewhere along our way from then to now, we lost this, as we lost other qualities and wisdoms in our haste to get power. Unconditional love knows that the men we contemptuously call terrorists must have reasons to do what

they do. I want to understand what those reasons are, I want to uncover their humanity.

Talk as long as it takes: force, never.

* * *

Or, maybe, it is just a stage. Scientists have determined that we began being human (not sapient yet) about one hundred and fifty thousand years ago. Followed a long, sometimes leisurely, often stormy, time of growing up. Slowly spreading out, but always only a few of us. Now, our species is adolescent. Not yet adult, but in that awkward teen time of too much fertility, too much testosterone, much too much experimenting blind: lots and lots of us, waging endless wars, torturing each other, messing up the planet that feeds and shelters us.

Here's to the future. If we and the planet survive our Sturm und Drang we may be what we once were, curious children, crying, laughing, sleeping, safe in the arms of the planet. Mature, we may add a newfound lust for living and loving—ourselves, each other, and the planet.
