

evolution – devolution

Lately have been rereading Loren Eiseley again. His words are clear and when appropriate, lyrical. Now reading *The Firmament of Time*, © 1960. On the cover, underneath the title, this sentence: "A vivid and original exploration of the changes in man's vision of nature and himself by the author of *The Immense Journey* and *Darwin's Century*." Interesting to be reminded how we thought fifty years ago, and a hundred, two hundred years ago. Our world is changing so rapidly, how we live changes, and how we think of ourselves and the world around us, keeps changing. Somewhere I read that we, humankind, destroyed more of our planet in the last 60 years than had been destroyed by volcanoes, tsunamis and other natural causes in the previous 200,000 years.

And yet we think ourselves the pinnacle, the glorious end result of evolution. We who think ourselves the top, the fabulous apotheosis of evolution, also think we are the owners of this planet. We are convinced that our science knows almost all the secrets of the universe, certainly all we need to know of the planet. From our own point of view we are what all of creation has always been about.

Eiseley covers the last few centuries, a fascinating account of how we changed (somewhat) our thinking about nature and ourselves. Halfway through the book I wanted to look sideways. He mentions only the changes in thinking within European history of the last two or three centuries. There is no mention of how the Chinese, or Indians, or Polynesians, or Africans, or all other humans thought of themselves and nature. I know some of what, for instance, the Chinese and Indian thinkers thought about who we were and how we fit into all Life on the planet. Their ideas were much wider and more natural than the narrow history Eiseley describes. Western thinking, Eiseley says, of course correctly, was Christian thinking, based on interpretations of a Bible that was put together 300 years after Christ. And so we came to think about ourselves thrown out of Paradise (nature?) for the sin of wanting to know. But also accepting without question that Man was made in the image of a Creator who worked six days to create us for whom everything else was created.

Eiseley's little book then is about western philosophers and scientists of earlier ages who somehow had to account for records of hitherto unknown life forms to be found in rocks, measurably much older than 4004 years. Eiseley describes how thinkers and observers slowly, in small steps, got us to accept that Life as well as Nature were not created and destroyed (the Flood and other imagined catastrophes) over and over again, as Europeans of the Middle Ages and after thought. Each time created all over again with improvements. He calls this Catastrophism, the idea that the fossils we found must have been earlier creations that were destroyed in an apocalyptic catastrophe, then recreated with improvements. Today's world would then be the last creation. Now, God finally got it right because we are the ones for whom the planet, probably even the universe, was created.

The thought that changes could happen all the time, continuously, that something we now call *evolution* is an ongoing process, resulting in ever more varied creations making an ever richer biodiversity was hard to fit into the traditional Christian world view. Darwin of course was not alone in framing his theory of a continuing process of evolution, but his voyage on the *Beagle*, and his book that contains so many examples of slow continuing change changed our (western) understanding of where and when we came from.

Do we realize that evolution also implies that change continues into an unknown future? We may be the most complex life form, but the last, the final?

Eiseley's writing is a delight. I remember we celebrated Darwin's 200th birthday not long ago, but his book came out in 1859, a hundred and fifty-one years ago. From what I know the general idea of *evolution* as Darwin described it, is a gradual change of life forms adapting to specific locations, to climate, altitude, ocean, land, etc. Today scientists have studied, measured, observed millions of distinct species. The Darwinian idea of evolution still comes back to the old idea of humankind as the *reason* for all creation. Called "teleology," change with a purpose, a goal. Formerly pictured as a tree. We, humans at the very top of the tree. As if we are what all creation is about.

Somehow that does not sit well with me. The idea that we are the best, the highest, the most, comes from our ego. Scientists as well as philosophers have talked and thought about what makes us so unique, different, and special. What is it that makes us different from animals, to be specific. There are and have been many answers to that. To name only a few: we have a soul, we have intelligence, hands with thumbs that make us able to make tools, a sense of being an individual — lately we call ourselves *homo sapiens sapiens*, the species that is aware of being aware. Certainly there is a difference between us and animals, but does the difference make us better? *More* something? Apes and monkeys, even ants, make and use tools — not the metal contraptions that we dream up, but a stick, a hollow stem; definitely tools. Dogs have much better sense of scent than we have, many animals see more than what we can see. There are animals that fly which we cannot do without a "tool." Some animals have much more complex intestines and other organs than we have.

The more I learn from other cultures, indigenous and aboriginal people's stories about where and how we became, the less I can accept that we are the final product of evolution. Most non-western humans never thought we were so different from all other life. Recent polls show that America may be the only country in the world where more than half of all people do not "believe" in evolution. In non-western and non-Christian parts of the world, evolution as a science has been accepted more or less "of course." Aboriginal and indigenous people have no problem seeing themselves as another kind of animal, they never denied that.

I remember a visitor from Europe who thought she must talk to me; I was probably eight or nine years old. She explained that we, humans, are so wonderful that it must have taken an even more wonderful, smarter, "Creator" to create us. Even then I thought that was explaining the beginning by the end, how it all started by who we are today. We think we are the best from our own point of view — well yes, but there are other points of view. At the time we had a young gibbon (one of the apes) at our house. I asked the woman how we were so different from that gibbon. She looked at me with disgust. *He's a beast*, she spat at me. The little gibbon was an animal, of course, but I knew him well, I knew how he felt, and why. Ours was the first relationship I had with another that was not simple. The relationship with my parents was difficult sometimes, but straight forward. The people "in the back" were a warm family. I had friends, and knew other kids. The gibbon was different. I knew that he suffered, he felt lonely with no other of his own kind around. He was fed and treated well, but I deeply felt his loneliness. There was a piece of soft leather on one foot, connected to a long chain. He could move, but not escape. I probably knew that if he escaped he would be caught by someone else, but I also knew that his circumstances were wrong. He was in a place that had no way out. I had seen gibbons in the wild. They are apes, a step up from monkeys. Gibbons are incredible trapeze artists. They fly through the branches of high trees from one long arm to a longer leg, seemingly in free fall or flight most of the time. And our little gibbon was tied to a pole. There were

times when as soon as I came home from school I would take off the little leather around his foot, and he would throw himself at me, his arms around my shoulders, his legs tightly around my hips, his head cuddled on my neck. I was never big for my age; he was heavy. I remember the day when I realized he could bite my neck; he had bitten someone, not seriously. When he wound himself tightly around me he would wimper a little, close to my ear (always the left ear). We would walk around, I talked to him, sometimes I thought he talked to me. Always tightly melded. Eventually I would sit down, and tie the little leather strap around his foot again. As he grew bigger — faster than I did — I would hear one or another of my family-in-the-back mumble *trouble*. My own feelings were troubled as well. He never had a name, we all referred to him as Siamang, just the name of the kind of black gibbon he was. I loved Siamang for trusting me, and for that tight, intimate hug, but I keenly felt his agony. Our driver, Udin — to me, my other father — said to me once, Siamang clings to you because you're the size of his mother, all of us are too big, and your sister is too small. Finally I talked about Siamang's pain to my father. He was a good listener. He told me again how some villagers had found the helpless, starving little ape, its mother probably killed; brought it to father's lab. One of the women had fed him from a bottle. When he was old enough it was my father who had brought him home, thinking we might "learn from him." I knew what my father meant and thought about what I had learned. After many minutes I said, "what I have learned is that I never again want to have an animal on a chain." Nothing more was said. I went to my room. That evening father took Siamang back to the lab. I guessed what had to be done. I knew of course that Siamang could not be taken back to the jungle. At our house, and before, at the lab, we had given him a banana, a bit of leftover rice, a bread crust; he would not have known how to survive in the wild, and wild gibbons would not have accepted him because he smelled wrong. I've never *owned* another pet, but very occasionally an animal has chosen to live with me. I've never tied them up, or prevented them from leaving if that is what they needed to do.

And yes, I am quite certain that thinking ourselves special is wrong. I know deep down that I am of the same stuff as that little gibbon, or the cats next door, or a tree. The same atoms, the same matter, we breathe the same air, we eat each other to live. We need each other, we are interdependent.

Sure, we are smart, we can invent machines but almost everything we do seems to be bad for other beings, for the planet, for our own survival. I can't see that as higher, better.

We have brains, slightly bigger than apes but not much. Our DNA is 98% the same. We have more forebrain, and so think differently probably. But when I look around and see what we do with our big brains I'm not impressed. If I were a visitor from another planet I would look at this conceited species that tells itself that it owns the planet and yet is busily destroying it, I would think *homo sapiens* a cancer.

After a long life and many years living close to nature, knowing myself part of nature, I think our view of evolution is too human-centered. I see nature as a marvelous chaos of life and death and change and movement. Nature tries everything, absolutely everything. Animals that have no legs, two legs, four legs, six, eight. A tail that is functions like an arm, a nose that serves as long arm and fingers. We expect left-right symmetry but on closer look it is the outside only. And a surprising life form with five arms, seven tentacles. Life forms that can live in salt water, or only in sweet water. Beings deep in the ocean who make their own light where sunlight cannot penetrate. Nature makes roosters with gold feathers, and roosters with white feathers

that flows like hair. Next door there is one all black cat with yellow eyes and the other all black cat has green eyes. I lived for some months in a forest of redwoods. Huge, enormous trees, fairly close together. On sand. Hardly anything grew underneath; the four months that I lived there it never rained. But every morning a thick mist came in from the ocean not far away. I learned that redwoods absorb through the whole surface of the tree all the thousands of gallons of water they need to survive for a thousand years. A wealth of variation almost unimaginable.

It is hubris to think we can design a better planet, as IBM advertises. Arrogance to put animal genes in a plant seed, modifying one species to eradicate another we don't like. We've tried this selective eradication for half a century or so, and I don't think it ever worked as the scientists assured us it would. Whoever thought that it was our job as humans to change the world. For thousands of years we showed that what our unique strength is to adapt to an incredible variety of different environments. We learned to survive in ice and snow, we survived in deserts and knew to find enough water. We lived at altitudes where oxygen is thinner, and we lived in steaming jungles. The same species, adapting to many different aspects of a world. Then, suddenly, we were sold the idea that we could and therefore should change an environment to our blown up needs, rather than to change our life style to the environment as we found it. We succeeded in messing up the planet to such an extent that we may have made it a serious danger to our own survival.

I cannot see evolution as a simple tree, us at the top. I think evolution is three or more dimensional. Sideways, up, down, diagonal, pushing the edges in all directions. Evolution, nature, cannot possibly be solely for the purpose of coming up with Man; it is so visibly random. The evolution of humankind was random, an accident. As all accidental creations we have some promising new features and other aspects that are dangerous to our environment and so, to our own survival. Minds are probably a wonderful thing, but we must learn to use them. We've gone off track. We've developed aspects of ourselves — ego, greed, selfishness — that are not sustainable. We have other aspects, like thinking **we** rather than **me**, collaboration rather than competition, that were working just fine for thousands of years. But lately we downplayed those because we told ourselves we must control nature, each other, Life itself. We've allowed ourselves to become control freaks.

It's time we rethink who we are, and how we relate to what is. It's time we learned to trust and love nature again. Nature is who we are, what we are. Nature is not environment, nature is what is in us as well as outside of us. We are one not only with our fellow humans all over the world but with everything. With plants, trees, volcanoes, rocks, oceans, fish, tigers, hawks. It's all one, jostling, loving, fighting, eating each other. We eat and we are food, we excrete what is needed by others. It all works together. Not a machine, but a live chaos.

Scientists tell us that all the energy of the universe is running down, entropy.
Life is anti-entropic, life keeps creating life.

Evolution is not to make humans, and then we can take over to make the changes we think best. How self-satisfied, conceited, and yes, stupid, can we get. We're not special, we're not smarter than anything or anybody else. We're different, that's all. Everything all around us is different. That's what makes it work. We've forgotten that all ecologies work because of an immense variety of species. It all works because each species has its role, "niche" as it is called in ecology. Scarab beetles, rats, hyenas, are the garbage picker-uppers. Animals eat plants, what they excrete is fertilizing plants.

Insects, birds, find honey inside flowers and doing so fertilize the flowers. All swarming Life is connected, dependent on each other, as a multi-dimensional spider web. When an ecology loses that diversity it becomes sick and old and dies. That has happened we now know. The planet has lost 70, 80, maybe 95% of its species at least five times in the last many millions of years. Think dinosaurs.

What I've learned again from the Eiseley book is that after each "extinction" the planet has blossomed with periods of intense creativity, evolving ever more wonderful creatures to assure the biodiversity that is essential for Life on this planet. That one species can *own*, control, and so destroy the Life of a planet is DEVOLUTION. That should be unthinkable to a thinking species.

We need to get rid of money, and I have a sneaking suspicion that we're on the way to doing just that — although not without horror and pain. Of course we must stop wars; the most wasteful of all our wasteful behaviors. Oh, I can think of a lot of things that need to be fixed here, today. A broken healthcare system, an insane economic system, a so-called infrastructure that is not very structural any more. A judicial system that has very peculiar ideas about who is "a person." But we find our way with a nest of wasps on one side and a broken sewer on the other. Not to worry, it will all collapse and then we start over again.

To spring up with renewed vigor and creativity, creating new forms, new species, new capacities, more brain, different brain, less brain — who knows. I find it quite easy to imagine a new kind of human that can move from here to there without a car or plane. A new kind of human that communicates with other humans — and who knows, with dogs and cats — without words; mind to mind. Why not? Who says we can only have five senses. I think we may already have seven or eight. I think it is quite possible to think of a new and better model human made open to each other's hearts and minds. If we had compassion, which some people already have, meaning knowing what another feels, we could not do the horrible things we now do to each other. If I feel what another feels I could not possibly torture her, or kill him. If I can sense another's hunger, how can I over-eat?

I don't think any of these and other qualities are spiritual, or supernatural, or abnormal. They are already part of us, but not developed; not fully evolved.

Why not give nature a chance to do what it does best: experiment, try this, try that. What survives is what adapts to changed circumstances. Not survival of the fittest if we think of "fit" as healthy, or clever, or powerful. The fittest are the ones who fit in. *Survival is always making do with what is, and making do becomes the new natural.*

Let go. Let go our need to boss. Let go our greed to have. Let go our seeking to improve when what we have is what there is. Let go our search for happiness, for love, for paradise — it's all already in us. Happiness is a naked kid singing a little song as he pulls a rock on a string through the dirt. Love is what I give of myself; it needs no other. And paradise? I always thought that was kind of a raw deal: to be given peace and love and animals and plants, but the one thing I am not allowed is to know? Forget paradise. The world is a marvel, a miracle, a chaos of possibilities.

What there is is all there is, so must be good enough.