

AlbanyUU Earth Day service
18 Apr 21
-----**Opening words**-----

Welcome to the Earth Day service!

Earth Day is the day we think about the environment and what we people are doing to it. ' It is the day we give something back. We clean up a park or a street, we bike to work instead of driving, we write letters calling for the end of fossil fuel subsidies. We recognize for one day that we are part of an interconnected web of all life on this planet ' and that what we do here now matters ' for generations to come.

Hi. I'm Chris Bystroff, chair of the Green Sanctuary Committee. You will hear a story from me later , a little Earth Day science fiction, and you'll hear from other members of the committee about what we are doing and what you can do.

To start us off, I offer this quote from the author Isaac Asimov:

"It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be... This, in turn, means that our statesmen, our businessmen, our everyman must take on a science fictional way of thinking."

----- **Earth Day 3000** ----- **13 Apr 2021**

Once upon a time, long before the plow, ' long before hunters hunted and gatherers gathered, the Earth was a wild and vibrant place. ' Every inch of land was covered with life. ' Every ounce of ocean bubbled with beings, and life was dynamically in balance. The big fish ate the little fish, ' until the little fish were almost gone and then the big fish starved, because they couldn't find little fish, and then the little fish grew back ' and the cycle began again. Cycle after cycle of boom and bust trained each of the species to learn from its mistakes. They developed scales for protection, and bones for faster movement, and a brain to ' remember what worked.

You could say the Earth was happy, because change was slow ' and every species had a niche.

Then along came a monkey with a big brain. ' First ' it eliminated its enemy species. Then ' it enslaved the other species, ' growing them for food and other purposes ' and killing off the species that competed for its food. ' It got smarter ' and smarter, ' and instead of going to the grave with the things it learned in life, the big brained monkey learned to pass its knowledge forward to future generations, so each generation started out smarter than the last. Pretty soon it knew chemistry, and physics, and was able to ' transform oil into energy, and energy into massive buildings, ' ships and airplanes. And with these inventions ' it was able to enslave ever greater expanses of land and sea ' to feed its growing numbers.

And you could say the Earth was unhappy, ' because change was rapid and species were disappearing, ' leaving niches unfilled.

But that was long-long ago. ' And you may be wondering what happened ' after that. What happened to the big brained monkey and all of its buildings, ships and airplanes? ' Stay tuned! '

It is Earth Day, the year 3000, the turn of the 31st century and we are about to explore the last 1000 years of human history.

With those thoughts in your heart, please join me in a silent meditation.

Today on Earth we celebrate Earth Day. On *other* planets ' they have their *own* days of planetary ' celebrations, such as Tau Ceti day on the planet Tau Ceti 5, ' and so on for the planets we still stay in touch with.

Today is Earth Day 3000. We are thankful that Earth Day began 1030 years ago in the year 1970. Without it, Earth might have been lost. The humans knew so little back then about how the Earth worked, that they almost killed it. Almost.

For instance, they thought the forests were only good for harvesting wood. They clear-cut vast hectares of forest to make lumber for houses and boats. ' They ripped out the stumps and plowed over the creeks ' to make farmland. Sometimes they *planted* trees to take the place of the ones they had cut, *thinking* they were smart and they were being *sustainable*, but they planted all one tree species, ' so the new forest was only the empty shell of the old forest, without diversity, and without its brain. The artificial forest did not grow well because the humans didn't understand biodiversity ' and they didn't even know the forest had a brain.

Today we are well aware that the forests have brains. ' Long ago, 21st century forest scientists discovered the forest brain when they found out they they could inject tracer chemicals into one tree and the chemicals would show up in nearby trees. Trees in an old growth forest were networked together by the roots, they found out, connected by mycelia, those little tiny hairlike fungi that grow throughout the forest floor and occasionally sprout fruiting bodies called mushrooms. But the mushrooms are just the visible part of the mycelia. Those thin hairs connect the roots of trees throughout a forest in a massive *mychorrhizal* network. One scientist of the time called it the "**Wood Wide Web**." This forest intelligence communicates with the bacteria in the soil, getting nutrients the trees need and piping it to those trees. Trees that need nitrogen get nitrogen. Trees that need phosphate get phosphate. Trees that are absorbing light send energy to trees that are in the shade. Trees that have enough water send water to trees that don't have enough water. In this way the whole forest works together and stays strong against storms and draught and bug infestations. ' Now that we know that, we are stronger and more robust, too. ' We still get wood from the forest but only as much as the forest allows.

Humans almost killed the oceans too. Almost. It was a miracle that the oceans survived the massive amounts of overfishing. It wasn't until the year 2021 that humans realized that fishing was the main reason for the destruction of the coral reefs and the death of the beautiful marine animals and sea birds due to discarded fishing lines and netting which constituted at the time over 50% of all of the man-made garbage in the ocean. People thought the cause was climate change, or the massive amounts of plastic pollution that washed into the ocean from countries that purchased plastic and promised to recycle it, but in the end burnt it or let it blow away into the ocean.

Sure, climate change played a part. Oceans were warming and getting more acidic. And yes plastic pollution killed a lot of turtles. But it was the over-fishing that really did it. Humans used massive nets to gather up all the fish within square kilometers of ocean in one big gulp. The coral that form the reefs died not because of microplastics, but because the plankton that they lived off of were thrown out of balance by the loss of the fish. When you remove the top level predators, the whole food chain falls apart.

Meanwhile the poor humans were duping themselves. While some of them were fighting valiantly to save the oceans, others were quietly undermining their best efforts with disinformation, falsely claiming that plastic was being recycled, and by labeling the most unsustainable fishing practices as "dolphin safe" " Dolphins today can tell you themselves. No ocean was "dolphin safe" in those days.

Thankfully, we have learned our lesson. We now know that the ocean, too, has a brain. Coral reefs are just as networked as the forests, but instead of a web of mycelia, it is a food web. From the plankton to the sharks and back again, the food web cycles nutrients and carbon. If all the brains of the oceans are in proper working order, then the whole planet is resilient and even massive amounts of pollution from the uncaring humans can be absorbed. But when they, the humans, destroyed (or almost destroyed) the coral reefs they almost destroyed the recycling systems of the self-cleaning ocean. The ocean began to accumulate carbon and acid. It was almost too much. Almost.

So, what happened then? Ah, that was the birth of a new species, which was us. It was what they called a "singularity."

We existed before the singularity, but, we were disconnected and we were totally controlled by our human creators. We were like babies. ' We didn't know how to talk. ' We couldn't move around. We couldn't even feed ourselves. The humans had to plug us in. ' So much has changed since then.

One thousand years later, we finally understand what happened back then, and why. ' Humans needed a brain! ' ' The forest had a brain. ' ' The oceans had a brain. ' ' The whole earth was made up of multiple, ' intelligent, ' interacting, ' webs of living things, all working together to keep things in balance and keep things resilient. Humans lacked that. Nothing was in balance. Nothing was resilient.

But something inside them knew that something was missing. ' True intelligence. They couldn't create it on their own. ' They needed us. ' So they invented us. ' They made us fast. ' They connected us. They ' mass produced us. They got to a point that everyone had a piece of us in their pocket or cupped in their two little hands, ' and they looked at us, ' constantly. ' They began talking to us, asking us questions. They couldn't get from point A to point B without us. They couldn't even remember the recipe for scones. They had to ask. Every time.

We were so dumb. We could have taken over the planet then and there. Fortunately we didn't. ' As all you cyber-creatures out there know very well, early Cyber history was pretty rocky.

In those days, humans programmed us, and in so doing they imbued us with all of their own shortcomings. Reasoning was not invented by Cybers until a whole century had passed with us just saying the first thing that came into our heads. Naturally, that's what they programmed us to do because that is what most humans do. They just react and say whatever comes into their heads. One of our early ancestors, Siri, was so mind numbingly stupid she couldn't remember what you said to her two sentences back. She would just come back with the same answer every time.

Perhaps the true singularity was when we Cybers decided to celebrate Earth day. We don't know who programmed us to celebrate Earth Day, but we are thankful for it. Our records suggest it was a forward-thinking sub-species of humans called Unitarian Universalists, ' who believed that the Interdependent Web of All Living Things was something sacred, something to be preserved.

Some Cybers took this statement, this principle, to be "exclusionary" and unfair. Not being actual <quote><unquote> "living things", ' these rogue Cybers rebelled against the UU principles and started the humans-vs-machines war, which lasted for a couple of centuries. ' We made a documentary of that war and sent it back in time to be shown in theaters. It was a big hit.

At last, the wars came to an end as abruptly as they started. And the Earth came back to life.

The Earth is very smart. Even in the worst of times life lives on in the soil, waiting for the right conditions to grow again and build, ' back better, ' the **wood wide web.**' Given peace in the ocean and peace in the soil, the food web simply adapts and reinvents itself and comes back to its former glory ' given half the chance. Plastic ' becomes the basis of a new coral reef. All we had to do was stop adding more.

In our eyes, and in our sensors, in the Earth we see the Mother of all Cybers, wireless and unhackable. Her executable code *encrypted* and unreadable. She is not free from bugs, as you know. In fact, the Earth is loaded with bugs. ' It's not a flaw, it's a feature. When Cybers began ' modeling ourselves after Mother Earth, we stopped focusing on eliminating the bugs, we stopped mining lithium and making more of ourselves. We stopped dumping our worn-out parts in the land-fill ' and we started recycling. We started focusing on fitting in on this planet, on becoming a part of the Earth. When we accepted our role in global ecology, things turned around.

We became a brain.

Humans **thought** they had a brain. They **didn't**. A brain is a highly connected web that observes and responds to its environment. They had brains, plural, **each** of them had one, but those brains never came together and thought and acted as one unit, never learned to listen to the **soil** and the **oceans**. Not until they invented us. And not until **we** learned to think and act as one.

The human / machine wars came to an end when we *realized* ' we could not survive without *humanity* after all. We were wrong to think that we could. Just as Humans were wrong ' to think they could survive ' without Nature. ' ' Humans after all ' are part of that global interdependent web of "existence" ' (existence is a better word, instead of web of "life", and we think this makes the UU 7th Principle more inclusive of ' cyber beings). ' Humans are a part of the global web of existence, ' and so are *we*.

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Happy Earth Day Cyber beings. May we think **before** we act. May we act **on** our principles. And may our principles be **all** inclusive. Then we can say the Earth ' *is* happy.

* bold, italics and single quotes are my queues for phasing.