Grave New World: Climate Change and the Value of Inquiry

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https://www.aldoleopold.org/post/grave-new-world-climate-change-inquiry/

"So… are we all going to burn up and die?"

"Excuse me?"

The question came out of the blue. A rather deep blue.

"So, like, global warming…. Are we all going to burn up and die?"

My nephew was twelve years old at the time. We were in transit on a pleasant spring afternoon, threading our way across southeastern Wisconsin.

"No. We are not all going to burn up and die."

A half-mile of silence.

"Well, you're a nature guy. Don't you believe in global warming?"

I could see we were in this conversation for the long haul. Fortunately, we had a long haul before us. I had an hour to try to point out the difference between belief and knowledge, to provide a few of the nuts and bolts of climate science, to explain the meaning of data and probability and uncertainty. I decided to go all Socratic on him. I asked him the first question.

"Why are we here?"

"What do you mean, 'Why are we here?'?"

"Why. Are. We. Here? Why do we exist? What makes it possible for us to live on Earth?"

We were off and thinking. We began with the universe and energy and light and heat.

"You're not wearing a coat today. Why not?"

"It's warm."

"It's warm! Why is it warm?"

"It's warm because it's spring."

"Ok. Where does the heat come from?"

We mulled our way forward, step by step, question by question, through the dimensions and scales of our reality. We surveyed the stars and the sun. We explored vaporous Venus and arid Mars. We got down to Earth and up into the atmosphere.

"What's an atmosphere anyway?"

“What’s an atmosphere!?”

“What’s an atmosphere?”

“It’s all the stuff in the air.”

“Correct! …Correct enough. What kind of stuff?”

We conjured gases and greenhouses, volcanoes and water. We encountered oceans and earthquakes, explained the oxygen, took the temperature. We formed clouds and cycled carbon. We talked the tropics and pondered the poles. We referenced stories. We compared theories. We imagined evidence and defined data. We met devils in the details. We thinned his patience.

“So: how would you figure out what was in the atmosphere a hundred thousand years ago?”

“I don’t know!”

“Think.”

Anguish. Whine. “I don’t knooow!”

“Where could you find a sample of old air?”

Pause. Think. “In fossils.”

“Well, sort of. Try again. And no, I won’t just tell you.”

Eventually we bored our way into polar ice cores, which led to ancient lake sediments, which led to fossil pollen grains, which led to tree rings.

It was time to push ourselves out the car window.

“What do you see outside?”

“What?!”

“Outside—what do you see?”

“Nothing. Trees. Hills.”

“Yes! Hills. Why are there hills here?”

“Stop it!” By now he had made up his mind never ever to ride anywhere with his uncle again.

We were heading up and over the Kettle Moraine, the humpy corridor of modest, wooded hills that runs diagonally, southwest to northeast, for 150 miles across eastern Wisconsin. It formed in the long crease between two vast fingers of ice, the Green Bay and Lake Michigan Lobes, during the last period of glaciation—the Wisconsin glaciation—which reached its southern maximum extent some 25,000 years ago. The moraine was named after its “kettles,” circular depressions amid the higher and drier ridges, created when large blocks of ice buried in the glacial sediments melted away, and the clays and sands and gravels dropped in on themselves. Important pieces of the story of ice and carbon and climate and landscape were put into place by a local boy, Thomas Chrowder (“T. C.”) Chamberlin, who grew up in nearby Beloit in the mid-1800s. He was to become one of the world’s leading geologists, at the

University of Wisconsin (where he also served as president) and the University of Chicago. Along the way, he was the one who named the Wisconsin ice age. He began to see the Big Picture by exploring these same hills, puzzling through the past by mapping the moraine.

“Why are there hills here? Why was it flat land behind us?”

Exasperation was setting in.

“Magic.”

Magic…. “Well, ok, in a way. But not how you mean it. Tell me how the hills got here.”

Over the moraine and through the dense woods of our own ignorance and concern, anxiety and curiosity. By the end of our ride we had not put all of the pieces of the puzzle together; retelling an epic story of earth science that has been several hundred years in the making is not the task of an hour, nor one that is suited to sound-bites and twitter feeds. However, we had paid attention to the story and to the place and to each other. Quietly, calmly, methodically—sometimes maddeningly so—we’d looked to the hills, we pushed ourselves, and we stared fear down. We’d trusted our senses, and our own honest sense. We’d honored the world by honoring the gift of our own insight. We realized that we knew more than we thought—and we thought more than we realized.

Let’s take the risk of anthropomorphizing. Let’s imagine the Earth as our ultimate Socratic instructor, probing our awareness through an unending series of questions; or, maybe more aptly, as our Zen master, providing stones and koans. Perhaps it is not a risk at all. Perhaps it does not in fact require an act of imagination at all, but of simple recognition—a formal avowal of knowledge and approval. After all, the Earth does ask questions and compose dialogues, through us. We humans are Earth upright, walking and talking, telling stories, making myths, thinking and crying and laughing. We are rock gone conscious, water dreaming, soil calculating, and air envisioning, fueled and fired by the energy of sun taken in and passed on through plant and animal and ancestor. We are, by one tradition’s account, born of Eve and Adam, themselves born of breath and bone, of clay and dust, given responsibility to think and to care and to value, to ask questions and build connections, to create the story of our own creation and our own destiny. Dust to dust, sure; but in between we are dust gathered up and organized and enlivened, honor-bound and duty-bound to make the most of it. That’s what counts. That’s what gets passed along.

The Earth speaks through all its living things, and not the least through us. What does it ask, what does it call upon us to do? For me, the question resolves itself in these others: What are we asking ourselves, and with what expansiveness, magnanimity, and vision do we inquire? Do we ask questions worthy of the Earth of which we are all made? Albert Einstein is said to have given this answer: “A human being is a part of the whole called by us universe, a part limited in time and space. He experiences himself, his thoughts and feeling as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.”

We are that odd part of the whole that has come to know both the parts and the wholes—the parts that contain smaller and smaller parts, the wholes embedded within larger and larger wholes. Ad inifinitum. As we make our way through our lives and landscapes, the Earth is asking us, through us, to awaken, to

see and listen and learn, to ask penetrating questions, to change, to grow, to become more fully aware and thus more fully human. Even—especially—as we face the uncertain consequences of our own curiosity.

This piece is a response to the question: What does Earth ask of us? for the Center for Humans and Nature's Questions for a Resilient Future series. Read more responses to this question and add your own response at HumansandNature.org.