



Warning to Humanity

FOUR DAYS LATER, I KNOCKED ON TOM AND LANA'S door at their second floor apartment near the university. Lana opened the door, smiling, and ushered us in. She appeared to be in her early forties, with straight brown hair down to her shoulders, and bangs cut across her forehead to give her a school-girl look. She was slightly plump, wore glasses, and looked the intellectual type. Her bespectacled husband Tom stood behind her as we entered. He was tall, lanky, and nervous, and vigorously shook my hand in greeting. Their five year-old daughter was at daycare.

Annie accompanied me to this meeting, not wanting to miss anything. The whole Lucy affair was getting more and more interesting to her, and she was increasingly intrigued at the new concepts she was being exposed to. Ecocide, no less. Secretly, despite the global warming homework I had done, I remained skeptical, but I wasn't about to stop moving forward on this if it seemed like we were actually making progress.

Lana welcomed us into their cramped apartment, quickly clearing the dining room table of papers and books. "You'll have to excuse this place," she said. "Juggling our teaching loads, research, and a five year-old leaves little time for housework."

“I know you’re a busy person, Lana,” I replied, “and we don’t want to waste your time. We’re here because we’re interested in learning more about that computer program you developed. Your friend Cynthia told me the program predicts the end of the world. My Aunt Lucy, who died recently, was a professor at the University of Montana and she was apparently doing similar research. Nothing personal, but we’re just here to see if there’s really anything to this.”

“Have a seat. Here, make yourselves comfortable.” Lana gestured for us to sit at the dining room table. She pulled out a chair for herself and sat down too. “First of all, Joe, our computer modeling program doesn’t necessarily predict the *end* of the world, but the end of the world *as we know it*,” Lana corrected, placing her elbows on the table and clasping her hands in front of her chin. “The world will probably carry on after a global collapse. It just won’t be able to support the human race in a manner we’re accustomed to. It’s more likely that our computer is pointing to the eventual *extinction* of the human species rather than to the end of the natural world.”

“If not a total extinction, then huge numbers of people will probably die,” added Tom, who remained standing behind Lana.

“Why’s that?”

“Starvation. Water pollution. Disease. Extreme weather and other natural disasters. War,” he replied.

“Your computer is telling you these things?” Annie asked.

“In a roundabout way, yes,” replied Lana. “Look, if we continue eroding our topsoil at the current rates, depleting our fossil fuel reserves, pumping our aquifers dry, while dramatically increasing the human population, how will we provide the food needed by the larger and larger numbers of people? Where will the soil fertility come from? Where will the wastes from these people go when nature’s ability to absorb them has been pushed beyond the limits?”

“It becomes pollution,” interjected Tom. “And

unchecked, excessive pollution fosters disease. Add a polluted environment to a hungry, over-populated, over-heated world and you're setting the stage for epidemics to sweep across the globe." Tom walked over to a nearby window and pushed it open, then sat down at the table opposite Lana.

"How would pollution lead to epidemics?" Annie asked.

"Take water pollution, for example," offered Lana, folding her arms on the table in front of her. "The human population on our planet has been increasing exponentially since the early 1900s. In 1999, our numbers climbed to six billion, the highest human population this planet has ever seen. Although it took humans hundreds of thousands of years to reach these numbers, because of exponential growth, we're going to double that within the next forty years." Lana peered at us over the top of her thick glasses. "So what does that have to do with pollution or disease?" she continued. "Well, every human body emits solid and liquid by-products on a daily basis. Because humanity is the only organism on the planet that insists on excreting directly into water, we're fouling our own water supplies. In fact, half of the world's major rivers are already polluted by human waste of various types, that is, if they're not already going dry due to human overuse. If we look ahead, in forty years there will be twice as much waste going into the same amount of water, or, more likely, *less* water. This is a recipe for disaster. Sources of safe drinking water are already becoming scarcer and scarcer, while diseases associated with water pollution are already epidemic in some parts of the world. And that's just one form of deadly pollution that's inevitable if we don't think ahead and find ways to live that won't force us to drown in our own excretions. Another is air pollution. Then, of course, there's body pollution."

"What's that?"

"What?"

"Body pollution. Sounds like something I'd have after

a long day at work,” I laughed.

“Body pollution won’t go away with a little soap and water,” Lana said ruefully. “Body pollution is the accumulation of toxins *inside* your body. It’s also called the body *burden*. Mammals worldwide, humans included, have been exhibiting a constant accumulation of toxic chemicals in their body fat since about 1950, no matter where they live, even in the arctic. The average human can now expect to have at least 250 toxic industrial chemicals lodged in his or her fat tissue.”

“Most of these chemicals cause cancer,” added Tom, who seemed to be tense, as if he drank too much coffee. He spoke rapidly, his wire rim glasses barely hanging on his nose. “Toxic chemical body pollutants accumulate in fat cells over time until they spark a reaction in the body, usually cancer. That’s one reason why cancer is now the second leading cause of death in America, and the leading cause of death among us baby boomers. That’s also one reason why so many women get breast cancer. There are lots of fat cells in the breast.”

“This is depressing,” said Annie.

“Sure it’s depressing,” agreed Lana, leaning toward us, her voice taking on an added tone of seriousness. “What’s more depressing is that no one seems to care. Our population is being kept in the dark about these problems. The media gloss over the dire issues as if they’re not important. And both the medical establishment and the media refuse to point the finger at industries that pollute the environment with cancer-causing chemicals.”

“Yeah, it’s unbelievable,” interjected Tom. “Even cancer researchers refuse to place any blame for cancer on chemical pollution of the environment. Even when the pollutants are known carcinogens.”

“Why, I have a friend who had testicular cancer,” Lana explained, leaning back in her chair and crossing her arms. “He had it treated with chemo, and survived. Figuring he had a new lease on life, he decided to adopt a baby boy. The first thing he did was go out and buy a wooden picnic

table soaked with cancer-causing chemicals, you know, 'pressure-treated.' I saw him feeding his toddler a peanut butter sandwich directly on the table. When I told him that the wood was soaked with carcinogens and that they could be absorbed into the food the baby was eating, or into the baby's skin, my friend said that he was not aware of any dangers associated with treated lumber. I explained to him that most cancers have a twenty year latency period."

"That means it could be twenty years later before the baby could develop cancer from his exposure to the carcinogens," Tom explained. "That's why most people don't make a connection between their cancer and its cause. They can't remember what cancer-causing chemicals they were exposed to two decades earlier. Then they die, and are silenced forever. And chemical pollution continues to spread throughout the environment. It's a sinister and insidious problem."

"After my warning," continued Lana, "my friend sealed the hell out of the table with an oil based varnish. He now seals it every year in the spring. He's the exception — most people don't care. They've become terribly passive and uninformed about environmental issues, issues that directly affect their health and lives. If this widespread complacency continues, or, god forbid, gets worse, all roads lead to ecocide. Global collapse. Things have to change." Lana insisted.

"That's the problem," added Tom. "Change is inevitable. Even a cold, heartless computer will tell you that. Nothing stays the same. Ever. The question is, will we continue to allow things to change for the worse, or will we look ahead at the impending doom that lies waiting in our future like a coiled rattlesnake, and change course before we're within striking distance?"

"Which will be soon," concluded Lana.

"If it isn't already upon us," Tom said.

"OK. With all due respect, what do you say to those people who simply brand you two as environmental

extremists? Wackos? How does anyone know that any of what you're saying is true? Maybe you're just making it all up. Or exaggerating," I argued.

"It's all documented. Scientifically. Everything we've told you, plus a lot more, is common knowledge among ecologists and environmental scientists around the world."

"Oh yeah? Then why haven't we heard it before?"

"That's a good question, Joe. Have you been living in a cave?" asked Lana.

"Or just watching TV a lot, which is about the same as living in a cave," added Tom. "Either way, you won't keep a finger on the pulse of the Earth if you're constantly inundated with messages from commercial media. They're trying to sell you something. They're trying to make money. There's no money to be made in warning people about eco-cide. In fact, the commercial sector of our economy fears that if people knew what was coming down, it would hurt business. That's probably why you haven't been exposed to the concept of global collapse."

"Did you ever hear of the World Scientist's Warning to Humanity?" asked Lana, looking at Annie.

"No," we both answered. "What's that?"

"It's just one example of how the media controls what information the public gets," said Tom. "No less than 1600 senior scientists from 71 countries, including half of all Nobel Laureates, issued a world proclamation in 1992. You didn't hear about it because, incredibly, it was deemed 'unnewsworthy.'"

"What was it?" Annie asked.

"It was a proclamation that, well here, let me find it. I have it in a file right over here." Tom jumped out of his chair and jogged into another room.

Lana glanced around the dining room as if searching for something. "I'm a lousy hostess, folks. I haven't offered you *anything*. You get me talking about these issues and I forget about everything else. How about some tea?"

"That would be lovely," agreed Annie.

Lana got up from the table and ambled into the

kitchen. “With or without caffeine?” she shouted from the other room.

“Without!” shouted Annie as I yelled, “With!”

In a few moments she was back with a pot of hot water, four cups, tea bags, and a bowl of blue tortilla chips. Tom soon came rushing back with a file folder in his hand. “Sorry, I had trouble locating the file. It wasn’t where I thought I put it. But I can’t believe you never heard of this warning.”

“Hardly anyone’s heard of it, Tom,” insisted Lana. “No one’s heard of *our* research, either. We scientists aren’t a wealthy bunch. We live in frustrating times. We do what we can, but it’s not enough.”

“*The World Scientists’ Warning to Humanity*,” began Tom, reading from a sheet of paper he had pulled from the file folder. “Listen to this: *Human beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at serious risk the future that we wish for human society and the plant and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about.*” Tom looked up. “That was in 1992!”

He began reading again, skipping through the proclamation, picking out the salient points: “*The environment is suffering critical stress, yada, yada, yada, ozone depletion, exploitation of ground water, pollution, destructive pressure on the oceans, loss of soil productivity, forests are being destroyed rapidly, irreversible loss of species . . . Listen to this: Much of this damage is irreversible on a scale of centuries or permanent... Our massive tampering with the world’s interdependent web of life — coupled with the environmental damage inflicted by deforestation, species loss, and climate change — could trigger widespread adverse effects, including unpredictable collapses of critical biological systems whose interactions and dynamics we only imperfectly understand. See what we mean about col-*

lapse? And our computer modeling is predicting this stuff too!”

“That’s not all. There’s more: *We are fast approaching many of the Earth’s limits. Current economic practices which damage the environment, in both developed and underdeveloped nations, cannot be continued without the risk that vital global systems will be damaged beyond repair. Uncertainty over the extent of these effects cannot excuse complacency or delay in facing the threat.* See! We don’t have the luxury of being able to delay in responding to these threats — that’s what they’re saying!”

“Let me see that,” retorted Annie. She snatched the paper out of Tom’s hand and held it in front of her, reading down the page. “Damn,” she whispered under her breath.

“What?!” I asked.

“Not only does this look legitimate — it has the names of the signatories attached —”

“Of *course* it’s legitimate. And you can download it off the internet, if you want your own copy!” exclaimed Lana.

“Listen to the conclusion,” continued Annie. “*No more than one or a few decades remain before the chance to avert the threats we now confront will be lost and the prospects for humanity immeasurably diminished.*”

“That’s right,” said Lana. “One or a few decades. That’s how long the scientists of the world give us. That was a declaration from 1992. According to them, we now have about twenty years left to make it or break it. They give us until 2022. In comparison, our computer model is being very generous in giving us forty years before ecocide — 2040. Twenty years to do something, forty years until the point of no return.”

“Point of no return?” I looked at Annie. “Didn’t Lucy say something about a point of no return in the first letter we got from her lawyers?”

“Why are you asking me? I thought you read that letter fifty times.”

“Well, she said *something* like that. Forty years probably doesn’t seem very soon to most people, especially peo-

ple over fifty who assume they'll be dead by then anyway. Twenty years, though, is right around the corner. Do you think these 'world scientists' know what they're talking about, Tom? It still all sounds just a little bit far-fetched to me, I have to admit."

"They're scientists," replied Tom. "It's their job. That's what they study. That's their speciality. If *they* don't know what they're talking about, who does. Exxon? Monsanto? The Global Climate Coalition? They're just industry mouthpieces. They'll tell you what they want you to hear. And what they want you to hear is that everything is rosy, just keep buying their products and everything will be fine."

"Joe's Aunt Lucy had a theory that the gross consumption we humans are engaged in, especially in the United States, is actually pathological," said Annie excitedly. "She thought that we would normally live in harmony with the world, but that the sudden availability of unguarded resources in the late nineteenth century, or earlier, sparked a psychological pathology in us she called a 'robbing frenzy.' And we can't stop it because it's gone on so long now that we're no longer really aware of it. We're born into it and we think it's normal, so we keep it going."

"Yes. She also thought that humans might just be a disease organism on the planet and therefore we're *supposed* to be killing the Earth," I added.

"I don't believe that," retorted Lana. "We are *not* a disease. At least *most* of us aren't. We *choose* how we live on this planet. It's our choice. We aren't destined to be a disease. I don't believe that. No way."

"Well, it's just one of her theories . . ."

"I agree with Lana," interjected Tom. "What a defeatist attitude! If we're destined to be a disease, then what's the cure? Has anyone considered that? Presumably every disease has a cure."

I looked sharply at Tom. "Don't ask *me* if there's a cure. My aunt thought we might be a disease because we *act* like one. Humans act like pathogens on the planet,

according to her and her pathologist friends. But she also thought that we may have a choice in the matter, too.”

“If it’s a matter of choice,” mused Annie out loud, “then the key must lie *within* ourselves.”

“Oh yeah, Einstein? What key is that?” I remarked.

“Quit being such a damned skeptic! Just because you don’t have any answers doesn’t mean some one else can’t come up with anything. For heaven’s sake!”

“Well, I was just trying to ask an intelligent question.”

“For a change.”

“Time out already,” called Lana. “I think we’re all a little overwhelmed by all this. Twenty to forty years to doomsday and no one gives a crap about anything except what’s on TV.”

“Sorry,” I said. “You’re right, Lana. Maybe aliens will come from outer space and inoculate the Earth with antibodies to wipe out us humans.”

“That’s really helpful, dear. Forgive my husband. He has an overactive imagination. We probably should be heading home anyway, don’t you think, Captain Kirk? If we hurry, I think I can get us there before aliens inoculate *you*.”

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