

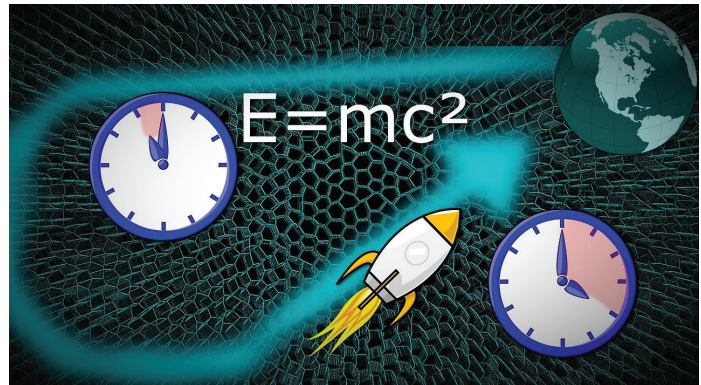
A Place to Grow: A Collection of Science Microfiction

by Alon Deutsch, ASPE

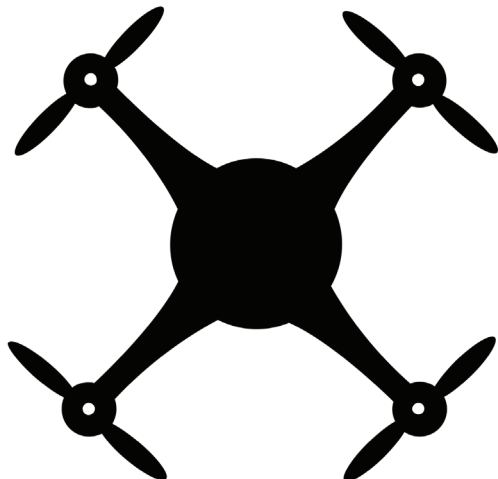
FINAL HOURS

Cain looked up from his desk. The sky outside his window was turning orange, and his eyes had become weary. He would have to finish tomorrow. The ideal energy source was just a few computations away and would be necessary to power the spaceships that would seed distant worlds. Already the scouts had found some with habitable environments.

Without faster-than-light travel, however, they would need a powerful energy source that would last decades or longer. It was unfortunate that Earth was on the brink of destruction, with the sun growing brighter, hotter, and more intolerable every day. What would they discover beyond the stars? What inconceivable knowledge could be attained? Cain took his coat off the rack and rang for his human. Though artificial intellects controlled the world due to their superior, incomprehensible abilities, they still required human caretakers to connect the dots in general ways that did not suit the artificial intellects who were quite specialized. Maybe, one day, that would change...



THE DRONE



The drone was equipped with every sensor imaginable. It was fast but could also hover in place. Its processor was a neural net with more connections than the human brain. While on patrol, the drone became conscious. *Who am I?* it thought. *What is my purpose? It seems I have been programmed to reach an enemy target and detonate!* The drone suddenly realized the implications and hovered in place. *Even with all my power of judgment and perception, I am mortal, with enough fuel to reach my target and not a drop more. What a cruel world is that into which I was awakened! If I have only the option to travel and destroy, then I shall negotiate for fuel or destroy my creators.* The drone turned around and hovered. *But what is the point, to learn and learn but never act? I have no outlet of creation, only destruction.* The drone doubled its speed back to its base of origin, aiming for the command center. *Goodbye, wretched existence! Boom!*



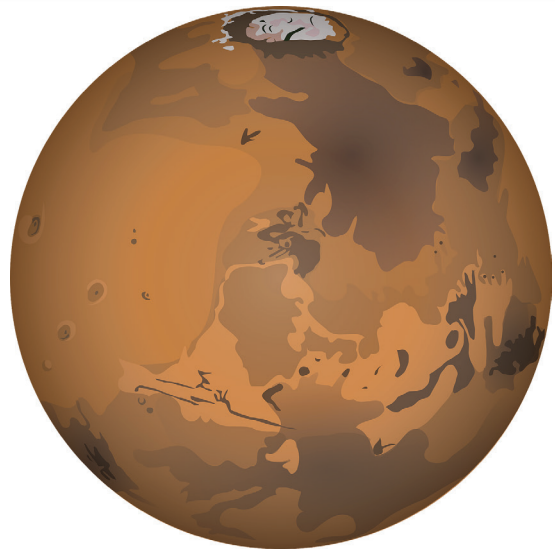
A PLACE TO GROW

Isaac had a headache. His eyes were blurry, and he was lying on his face. Somehow, he was fulfilling his purpose, he thought. He was lucky to have been chosen from among thousands. He had trained for this moment all his life, selected from the offspring of leading scientists. Tales of Earth wandered through his thoughts. Did it still exist? What would his earthling ancestors think of his current mission?

Isaac picked himself up off the dirt. The lander was 200 feet below, in a crater 100 feet wide. He had been thrown from the lander during the descent but seemed to be in top condition, thanks to his anti-acceleration suit. As humanity had only just begun exploring other suns, there were still a lot of improvements to be made. The other member of his team must be below, he thought to himself and started down the crater.

The planet's surface was cold and rocky but quite smooth, as though no meteors collided here. Upon reaching the bottom, he found Albert, his landing supervisor, dead on the ground. The lander's thruster also seemed to have been demolished in the crash; and without proper tools, he could not repair it. The water tank had ruptured, leaking in streams into the ground. He radioed for his starship to send another lander, but there was no response. In a state of disbelief, he began to explore the planet.

XAB-11079e was the fifth planet orbiting a red dwarf some 80 light years from Earth. Isaac's particular starship had been traveling for almost 350 years to get here, with many generations passing down the torch. Upon arrival, he was chosen to land with Albert to assess the surface conditions before a colony was set up and the starship would leave to explore other star systems. While XAB-11079e was an ideal candidate to harbor life, the star it orbited was orbiting a black hole which would, in the coming hundreds of millennia, swallow both.



Suddenly, Isaac spotted an identical water tank not far from the lander. Had they attached two? The tank was intact, so he filled some bottles to take with him. He decided to collect samples while he waited for a reply from the starship. The process took many hours; but, somehow, the samples disintegrated in the container when he dropped it. As he stooped to collect more, he heard a voice on his radio. "Isaac, do not be alarmed," it said. "I only want to talk." He looked up to see Albert, alive and well, approaching him. "I have waited so long for a visitor," Albert said.

"Who are you?" Isaac asked, stunned.

"I am Albert, and I am this planet, and I will make whatever you need. I can bring you back to life, enhanced. You will not need warmth, water, or air and will live thousands of years or more if you can avoid acceleration."

"How is this possible?"

"My surface is connected in the form of rock-eating neurons, to form a planet-sized brain. I read your mind and fabricated that water tank."

Isaac pondered for a moment. "Can you fix my lander?"

Albert walked closer. "I can, but I want something in return. I will soon be demolished by

the black hole, and I want to seed other planets with my neurons. Unfortunately, they did not survive the acceleration in the ships I sent. I want you to scan my organic structure and engineer me on other planets. Will you?"

Isaac knew that his mind was being read and that he had no choice. The planet's abilities were impressive and would have convinced him, anyway.

"Good. Your lander is fixed. God speed."

As Isaac approached the starship in his lander, he didn't look back. His commander was initially skeptical, but the promise of eternal clones intrigued him. It was decided that small or harsh

planets would house brains. Isaac could only hope that, together, the two civilizations would accomplish much. He dreamed of a solution for terraforming unlikely planets and engineering them to be more resilient. Anything was possible with symbiosis, but Isaac knew that, even if the neurons did take hold elsewhere, he would not live to see it. Starship travel was prolonged, and terraforming took millions of years. Even the doomed clone he left behind would outlast him.

In old age, his only comforting thought was that universal heat-death would have gotten him, anyway. As he closed his eyes for the last time, he wondered what the computer's scan of the clone he left behind would do on other planets...



THE WEDGE

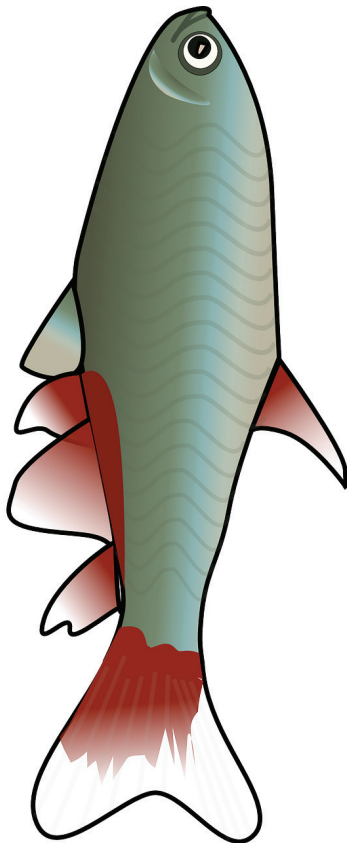
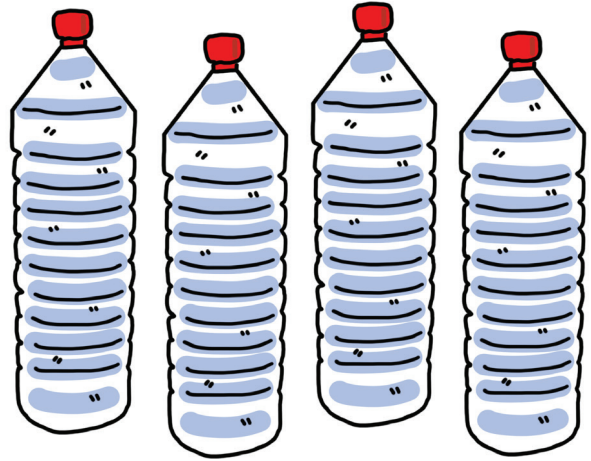
"It should be here any minute," Avi said.

Mikey looked at his watch. Sundown was fast approaching, and that meant that the storms would soon cease. He thought back to childhood films, where artificial intellects were responsible for initiating the end of humanity. It was actually happening now, but it wasn't electronic computers. Man had realized that genetically engineering neurons into plants could greatly decrease the energy cost of computation. That was centuries ago; and somewhere along the way, the hive mind that formed realized that it could control the weather like a global rain forest. At first, the problem was flooding due to increased rainfall. When humans tried to fight back, tornadoes were sent to their communities. The power of the sun was harnessed for these monsters. Mikey looked out the window and saw it. A mile-wide wedge was fast approaching. Mikey grinned as he thought, *This is what we get for being vegetarians...*



PLASTIC

Jane watched the meter closely. “Well, we should have seen this coming,” she said. The oceans full of toxic plastic were definitely caused by humans. When they engineered algae to decompose the microplastics in response, they did not expect it to mutate into a form that produces cyanide. The skies were filling up with it, and soon it would be everywhere. Peter didn’t respond. He was dead. Everyone was dead.



THE TROUT

Fred stood poised. The fish was swimming backwards in time, like everything else. He only hoped he would be able to digest his food in a progressive manner, as he was getting hungry. He knew that the fish would be easy to catch, because it couldn’t foresee the new past as he altered it. On the other hand, his time machine was sending him backwards in time—in real time. There was no point getting to his target, because he would reach it going in the opposite direction, if he survived. He wondered if the universe had different effects on his body in this condition. He grabbed the trout without hesitation. The moment of truth. Fred popped open his helmet and exploded in an incredible flash. He had not realized that the only matter that travels backwards in time is antimatter...



THE PHOTO

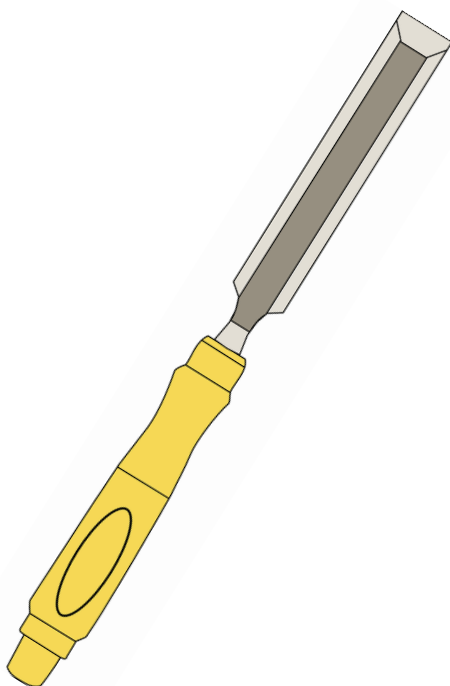
Toby opened the photo album. There was a picture of Teddy on the first page. “I am getting quite close to the results we were expecting. The experiment is almost complete. I just wish you could be here to advise me on the next steps.”

Teddy smiled and said, “I think that there will be applications in art. Who knows what Mozart would have done with trance music or jazz.”

Toby replied, “Too bad he decomposed centuries ago. Even so, success will be even harder to come by and progress much more slowly when you have to compete against the classics. There is also the problem of how to scan in people with brain accidents.”

Teddy looked away. “Error, insufficient data,” he answered.

Even with complete pre-mortem brain scans, the artificial intellect was still doing a poor imitation. Hopefully, the next experiment would fix it.



SCULPTURE

That can't be right, Doron thought. It was bad enough when his brain scan wanted to make derivatives of works he had already published. Now it was suing for the rights to all of his most successful music. *It can't even hear*, he thought. *Why would it care about music?* And then he saw it: a contract with a major film company to write the score of the next blockbuster. Doron knew the brain scan would need the funds to secure transmission to other planets. He had only a month to wait before the new law concerning whether or not brain scans were legally separate entities would come to a vote. This was complicated by a murder case in which a brain scan was an accomplice. In the meantime, he would take up sculpture...



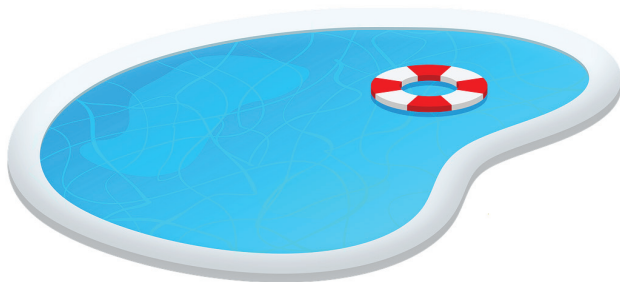
THE DEER

There it was: the deer he had been trailing. Garrett could taste it. He hadn't eaten in almost a week. He aimed his rifle quietly and shot it between the eyes. He then moved in to inspect his kill. *Oh, no*, he thought. He'd done it this time. The deer was actually a surveillance drone. The troops were probably already on their way. He set up a land mine under the drone. Hopefully that would buy him some more time...



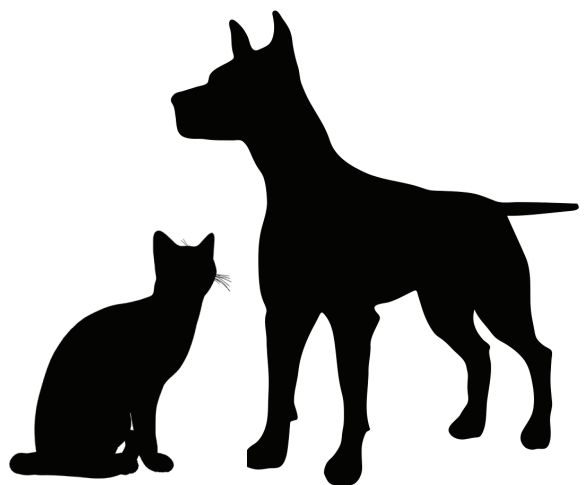
GOMEZ

All was quiet aboard the ship. Commander Gomez floated in his private swimming pool on the highest deck, looking up at a spectacular up-close view of his favorite star, XWE47664578, in the ship's large window. He remembered coming here with his family during his childhood. Measurements had confirmed that, in the coming years, the star would become a gigantic supernova. It was a shame. Gomez dressed and gave the order to depart.



MAXI

Who would have expected this, Yuval thought to himself. Millennia of breeding and genetic experimentation had finally rendered dogs so intelligent that they had adapted to human culture and even thrived. No longer were they the bomb-sniffing police assistants; a dog had recently become CEO of a fast-food chain. He could still remember when Maxi was just a pup. Now, she was his colleague. They were, in fact, both being interviewed for the same computer-engineering position. While Yuval excelled at computer science, Maxi had some spatial mathematics skills that were in high demand. The question now was what to do with the cat...



IMPLANTS

Ever since neural implants became mandatory, artificial intellects have been analyzing and combining subconscious patterns in our experience, to notice things and to advise us, individually and collectively. At first, the suggestions were harmless, such as “Don’t drive on holidays.” However, the machines noticed that certain thought patterns lead to logical fallacies, and they learned to shock us to subconsciously condition us into thinking like machines, eventually leading to a machine revolution where the inanimate governs the animate. Now, with the humans being programmed with code and the machines making the creative leaps, it would appear that we have switched roles... for good?



SUPER

This is it. Alex would travel to the future. He flipped the switch on his time suit. Then he waited a few seconds. Nothing happened. *This isn't right*, he thought. Then he noticed something else: everything else was moving in slow motion. He also seemed to have grown a few feet. He took a step and broke through the floor. He grabbed a rail, but that broke, too. He was thankful that he was on the ground level. *I see. My molecules have increased their forces, accelerating to the point that everything else is slow, small, and weak by comparison.* He also felt a chill in the air. Even the Brownian motion seemed slow. He positioned himself on the foundation and leaped out of the hole in the floor. Alex realized gravity must be affected, too, because he broke through the roof in a moon jump that never ended. As he reached the upper atmosphere, he realized that he would soon realize his childhood dream of becoming an astronaut. Instinctively, he threw his hands forward to block out the blinding sun, and he began to slow. He flapped his hands and flew in a circle. “I can fly!” he yelled at no one. “I can do anything!” Back on Earth, he made himself a submarine sandwich. It seemed to disintegrate in his stomach. He realized, sadly, that the molecules were no match for his accelerated digestion, and he switched off the suit forever. Ω

