## The Last Two People on Electra IV A story of the Lost Commonwealth

Michiko saw the buzzer swoop down on Torrance, but could do nothing but watch in paralyzed horror as he was carried away, enveloped its glittering tentacles. One moment, he was scrounging for groundnuts in the scrubby brush just a few steps away from her. The next, he was gone. And there were no longer three people alive on the planet Electra, only two.
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Three years previously, a great lozenge-shaped ships, almost ten kilometers long, that had appeared in the sky above Tulare, the primary settlement of Electra colony. The invaders struck quickly. Thirty-two "buzzers" insect-like robotic craft with long tentacles streaming behind them, had descended from the ship and attacked the school, carrying off all twenty-nine students and three teachers. Among were Michiko's husband and son.
After the attack, the giant ship simply hovered over the city for nine months. It did not launch further attacks, nor did it respond to their efforts to contact it.

Michiko lay on the cold, cold ground for a long while thereafter, simply staring into the indigo sky. The buzzers were sensitive to electromagnetic emissions and, less so, to movement. By lying flat on the ground, hidden in the topography of the rocks and brush, the material of her poncho shielding her thermal signature, she had a chance of escaping detection until the machines moved on.

She thought she ought to have felt something related to Torrance's death. Living in the tunnels with him, sharing what little food they had, dragging the sled back together and dropping so often from weakness, exhaustion, and despair. She tried feeling angry, for Torrance letting the Machine take him, but failed in that also. Instead, the thing she felt most was hunger, and she had learned to live with that.

She lay still on the ground for a long time, staring into the indigo sky, listening for the hum. Then finally, she sucked in a great slow breath. The bracing cold, ozone-tainted air of the Mesaba Desert stung her lungs. Eventually, she stood and shook the sand from her long black hair. Ahead of her was a vast landscape of dehydrated, gray-beige broken on the horizon by outcroppings of black volcanic rock. Most of Electra was like this, as though God had run out of ideas and left the planet half-finished.

She checked the map again, stretching it between her thin brown hands. It was not a proper map, just

pictures and lines crudely drawn with concentrated blood and berry juice on a torn fragment of faded
cloth. A real map, on a real handheld datacomp, might have attracted the machines. This had to do.
Once she had oriented herself, she began walking.

Tulare had been one of two cities on Electra colony. The other was Modoc. "Cities" was a generous description. There was almost no construction beyond where the two hollow-cylinders of the colony-pods had landed, four or five centuries earlier. A few thin strips of irrigated land, fed by deep subterranean glaciers to which the colony pods had sunk their drills. About a century before the Machines had come, both populations had consolidated into Tulare to better share resources.

Michiko and her family had lived in a suite consisting of three joined compartments on the outer ring of the colony-pod. She had been the colonial archivist, and an assistant engineer to the power plant. Electra had been a small colony, and everyone had had to work three jobs, including one in food production. Michiko had been working in the hydroponic gardens the day the giant ship came.

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She walked alone for ten hours and finally reached the wreckage of the SandWorm just as the sun past its zenith. It sprawled in a half-twist over the landscape. Its organic components clung to its alloy skeleton like dried leather. SandWorms were gigantic machines – two-hundred meters long and ten high – deployed to tear through Electra's surface and digest the compacted sand and rock into soil for the crops and trees that would eventually bring life to this world.

She entered through a broken segment link. It was completely dark on the inside and she felt her way along until her hands found the latch to a door. She pulled it upwards. Stale air, centuries old, escaped in a hiss, provoking a coughing fit that almost rendered her unconscious. A dim light came on in the cabin, startling her for a moment. She realized it was automated, and that she should take it as a sign that the old wreck still had what she was looking for.

Her eyes adjusted to the feeble output of the light source, and she saw lockers along one wall, a supply room. She opened the first locker, empty. She opened several more before finding one that contained food. The wreck was over three centuries old, but the former Commonwealth had had extraordinary food preservation technology, and Electra's environment was more or less sterile. She ripped open the packaging. The contents were flavorless, but filling. Maybe eating three hundred year old food wasn't safe, but she calculated she was more likely to starve or be taken by the machines than die from whatever was in the packaging.

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For over nine terrible months after the initial attack, the ships hung in the sky and did nothing more. She had looked up at the ship every day, wondered what was being done to her husband and son, what experiments, what tortures were being inflicted on them.

And then, one day, a day more terrible, more awful than the day of the first attack, a huge panel on the side of the lead ship had opened, and a small army of buzzers had flown out. Awful things. For three

days and night, they had picked off the human inhabitants of Tulare, one at a time, two, whole families and taken them to the Mother Ship, from which none ever returned.
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She stuffed more packages of food into her rucksack, and then left the locker. Feeling her way over debris, bare tubes and wires where the walls had collapsed, she finally came to the Engine Room. The door was heavy, and she was weak, but it gave way with a grinding of old alloys. In the darkness of the room, she quickly found the fat, round reactor core.
It took her a long-time to pry out the first power rod, longer than she had figured. And when it came free, there was only the faintest red glow at the bottom. Despair clawed in her gut. She fought it, moved to the next slot and began prying free another power rod.
After so long, she knew there was no hope of finding a rod that still glowed bright blue, or even green, indicating a full charge. But she did not need that much power. In fact, with Torrance gone, she needed even less.
The second rod came free, and it glowed dimly amber. She sighed. Another one like this, and the journey would have been worthwhile.
She worked for another two and a half hours. When she was done, she had collected five rods whose dim red glow indicated they were nearly exhausted, one cold black rod, devoid of energy, and three precious amber-yellow power rods. They were heavy, and she had to balance her pack on her shoulders to make the trip back.
The sun was waning when she left the SandWorm. Perhaps three-quarters of the day was gone. She did not want to be caught out at night when the machines had the edge. She set her return course, and began walking, deliberately not looking at the sky.
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Only a handful had escaped running out through the tunnels under the city, the ancient maglev tunnel that ran between Tulare and Modoc 2,000 kilometers away. They had been unused for centuries. They had been forgotten, but Michiko knew of them. They sealed the gates behind them, and filled the entry chambers with rubble. So far, the machines had not found them yet. The only times the machines had picked them off had been when they ventured outside the tunnels for water, or for increasingly precious food.

Michiko reached the base as the sun was low in the western sky, shadows were lengthening, and the color had gone from white to a pale gold that would ripen to a weak saffron as the sun ended its sixty-hour transit. Sunsets were not much on this world. The blue-white giant sun, and the thin oxygen-argon atmosphere did not vary the color much.

She climbed down through the ventilation shaft and sealed the hatch behind her. The shaft was, they hoped, too small for a buzzer to squeeze through, even if they could find the hideout. The alcove

appeared empty at first, but she knew it was not. "Byron, I'm here," she said. "Torrance is dead."

Byron emerged slowly from one of his many hiding spaces, this one a niche in the wall covered by old structural panels. Byron was short, and had been chubby in the days before the Machines came. Now, he was thin and wiry, bland-looking, too-large nose, pale blue eyes. He managed to keep his hair clipped short with tools from the medical kit they had fled with.

She tossed him one of the food packs from the SandWorm, and took one of the water packs that lined the rack along one wall. The water inside was bitter, tasted of acid. Electra's water had always tasted faintly bad. Without the processors, it now it tasted strongly bad. But she needed it.

Byron tore open his food pack. "Is it safe?"

"No," she told him. "But what is?" Michiko mixed some powdered Geneberry into her water. Geneberry made for an even more bitter taste, but sanitized and decontaminated the water.

Byron drew out the food with his fingers, and inserted into his mouth. "Bloody awful." She had no answer for that. He ate two more handfuls before asking. "How did Torrance die?"

"A buzzer got him."

Byron was angry. "The Machines. The Godforsaken Machines. Making a treaty with machines was the worst mistake humanity ever made. I'm sure it seemed fair at the time. We got all the planets that can support human life, they got the planets uninhabitable to us. They just waited until we were too weak to fight back. And while we sat out here on the Outer Rim, they destroyed the Commonwealth."

He stopped and ate some more. Then, he said, "Let's have sex."

"No, Byron." She lay down on the bed she had managed to put together from blankets they had fled with, and pads they had fond later. Byron was silent, and she may have dozed, because when she opened her eyes again, he was closer to her. He whispered to her. "Promise me you will kill me, rather than let the Machines have me."

"Good night, Byron," she said, and slipped into an exhausted slumber.
In her dream, she dreamt of making love to her husband Akiro and to Torrance as well. They were sharing her. Her son Hiroshi waved at her from a great distance, and she felt self-conscious that he would be watching such a thing. Then, she realized how to make it better, and invited him to join in.

She awoke later to a tickling sensation. Something was crawling across her arm. She shook her arm and whatever it was... probably a cockroach ... was thrown aside.

She felt very sore, and rather ill. It might have been the three hundred year old food. Byron was nowhere near. He had to be sleeping in one of his hiding places. Deciding she was rested enough, she grabbed the bag where the food and power rods were hidden, stood, and moved aside the grate that covered the

ventilation exhaust shaft. They had filled the connecting passageway to the tunnel with debris to keep the Machines out, but a slender crawlspace connected the service alcove to where the tracks were laid. The lights in the tunnel glowed continuously, absorbing light from the surface.

The vehicle resting on the tracks had been, in its past life, a maintenance sled, used to ferry tools and workers down the maglev line. It was four meters long, a meter and a half wide. She had found it 60 kilometers down the track, and had spent many long-days dragging it back to the service alcove. To minimize weight, Torrance and another survivor, Ming, had stripped it down to its essentials; frame, floor, controls, and power plant. It was ugly, like the metal skeleton of a an insect with the carapace removed. But with power from the rods, it would carry them.

"Good morrow," said a voice, almost making her jump. Byron was already awake.

"Last night, you never asked me if I found what I was looking for," she replied, slowly removing the first rod from her pack.

"I did, but you were already asleep." He eyed the rod. "Is there enough?"

"I think so. With Torrance gone, we have sixty or seventy fewer kilograms of weight, which means we have a better chance of making the fuel last until we get to Modoc.

"To die there, rather than here."

She wasn't about to get into this argument again. Before the two outposts had consolidated, Modoc had had more agricultural development than Tulare. It sat atop a natural aquifer. There was a chance that food still grew in the abandoned agro-pods. Maybe the machines were there, too, but maybe they weren't. A slim chance at survival in Modoc was better than the certain death that awaited them here.

She slipped the rod into the receptacle. She inserted the power leads into their connectors at the base of the distributor. For a few seconds, nothing happened. Then, a faint hum arose deep inside the power block. Black-faced instruments at the front of the sled came to life with electric blue characters and pictograms. Michiko studied them, and as she did, a strange feeling of desperate hope came over her. "It works," she said. "Let's go."

"Now?" Byron was shocked. "Shouldn't we test it, or pack up or something?"

She carefully lowered the vehicle's power settings to minimum idle. She felt a little uncertain. Piloting the vehicle was to have been Torrance's job, but she was pretty sure she remembered enough to do it. "We've got food and water for fifteen days. There's nothing to stay here for."

Byron began shaking. "I've grown attached to this cave, and to being alive."

"We're dying, Byron," she told him. "Do you want me to remind you how Berkeley died? How the machines took Angel, Ming ... Torrance? We haven't been safe, we just lasted longer than the others."

Byron stood there, quaking and unable to move. To make the point, she expended a few precious units of energy to rev the maintenance sled. "Get on," she ordered him.

Unsteadily, Byron climbed onto the sled behind her. He grabbed her waist. Her thumb nudged the accelerator. The sled only shook a little, less than she had expected, before finding its footing on the rails. Slowly, it began to move along the tunnel. Michiko felt no need to look back. She thought Byron might,

and she pushed the accelerator forward a little more. This time, there was a little jerk as the craft sped up.

One more acceleration and the little maintenance alcove where they had hidden from the machines disappeared behind them, and they were speeding along the tracks to whatever lay ahead.

The tunnel passed by them as a monotonous, rock-lined tube with nothing to break the monotony except the markers, every 10 kilometers; red ones marking the distance from Tulare, blue ones marking the distance from Modoc, dimly lit by recessed light tubes.

In the first two short-days, they covered over 600 kilometers, which meant that they would arrive in Modoc with at least a few short-days worth of food to tide them over while they found out if any kind of food remained there.

Michiko wondered what they would find in Modoc. In addition to the colony pod, there were supposed to be two, or possibly three, agronomy pods. When the Modoc settlers had come to Tulare, they probably left the immature crops growing in the fields. She hoped. Their seeds may have propagated. She hoped. Whatever food was there would be edible, not rotten or not yet ripe. If not, there would be problems. She would have to find a secondary food source. At least the fuel cells were holding out. She was still only on the first, and it showed no signs of exhausting.

She squinted. The tunnel seemed to be growing lighter ahead. Suddenly, they emerged from the tunnel into daytime brightness. She looked up, and the worst expletive in her vocabulary leapt from her lips.

The tunnel was open. Somehow, since the maglev was built, the ground above it had collapsed and now they were exposed. A second later, they were in tunnel again, but only for a few seconds before bursting into daylight.

She felt Byron stiffen behind her. She wondered how much electro-magnetic radiance the sled was putting out. She wondered if the machines could detect it from Tulare.

For several minutes, nothing happened. The sled glided onward. As far as she could see ahead, the tunnel was exposed.

From behind them came a buzzing sound.

"No!" she called out. She refused to look behind her. Byron began screaming, an incoherent stream of obscenities, terror, fury, and despondency in equal measure. She pushed the thruster forward all the way.

She sled shot forward. They were in a narrow channel cut into the rock and she could not see over the sides. A shadow passed over her, like a big fat insect trailing a mass of glinting steel tentacles.

She pressed the accelerator, but it was already at the limit. Another shadow buzzed her. Instinctively, she ducked. The sled was maxed. She scanned frantically to see if there was a tunnel ahead.

Then, the sled did pick up speed, about the same time she no longer felt Byron's mass behind her, and the sound of his shouts tapered off and disappeared.

"No!"

It was the matter of an instant for the metal tentacles to wrap around her, squeezing her in a cold,

high up. She closed her eyes, daring not to look.
She blacked out.
An unknown amount of time passed, during which she felt nothing and thought of nothing.
She came back to consciousness staring into a bright white light through eyes that had opened before her mind awakened. She could see nothing beyond the light. She could feel some kind of metallic frame enclosing her body, but could not tell if she were upright or lying down. She was thoroughly paralyzed, but she could feel hair-thin metal filaments probing into her body in a hundred thousand places, digging deeper, filling her with a tingle of energy. She tried to open her mouth, but some kind of mask was clamped over it, which kept her from screaming.
The light faded, as though her mind had switched off, diminished to a dot, then went out.
She spun in an ocean of silvery light, and parts of her kept coming apart. Her legs fell apart and the tiny pieces of them spun around her, like sand. She wanted to reach out and try to grab them, but something was wrong. She looked down to see that her arms were gone as well.
And for a long time she was nothing.
Then she would find herself falling apart again. First the legs, than the arms, then her torso, her neck, and her head from the back of her scalp to her face. There was a sensation of ants crawling all over her as she was disassembled.
And then it would repeat.
After a while she wondered if it were just her mind being taken apart.
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She was uncertain whether she was dreaming or not when her eyes opened again. She did not feel the

strangling embrace, and she no longer felt the sled beneath her. There was a sense of being lifted high,

she was uncertain whether she was dreaming or not when her eyes opened again. She did not feel the frame around her body, and all around her was a flat grayness. She made this out to be the concave space of a large empty chamber. No sooner had she come to this realization than a vertical seam of light appeared at the edge of the chamber, then parted.

The creature that entered looked vaguely humanoid... a tall, slender feminine figure, who appeared to be made of silvery light. When it came close, Michiko could not help staring at its elliptical, melon-shaped head, which was silver, and possessed large mirror-like eyes, which expanded and contracted to convey the creature's expressions.

There is no need to be alarmed. You are safe.

She did not speak. The thoughts simply flowed into Michiko's mind.

We are the machine race that at one time held claim to the second and third planets of this system.

"I knew it," said a voice, a human's voice. Byron was there, in the chamber with her, by her side. But she found she could not move to face him. Also, his voice sounded strange.

Your kind and our kind reached this system at the same time. Your kind wanted the fourth planet, to create a home for yourselves, one of many across the galaxy. The fourth planet had water and oxygen, which are necessary for your survival. There were extensive deposits of silicon, yttrium, and palladium on the second and third planets, which are necessary for ours. Most of our kind left for the Galactic Core three hundred and six of the fourth planet's years ago. Some remained behind, out of concern for your colony. At the time your Commonwealth fell silent, there were 16,670 human inhabitants of the fourth planet. At the time of our intervention, only 399 humans remained. This level was not sustainable.

"When we were to weak to resist you!" Byron hissed.

When you created Machinekind, you created, in our most fundamental programming, an imperative to help and assist humans. Never to destroy. You knew we would become more powerful than you, and so you wisely made benevolence part of our defining matrix.

Michiko flexed her fingers and felt electric prickles of energy pulsing through them. "What have you to us?"

We had to re-make you. Your kind could not have survived without adaptation to the environment.

"So, why not just repair the terra-forming equipment?" Byron argued.

The Silver Lady cocked her abomination of a head, raised one of her silvery fingers. Michiko felt a direct transmission of knowledge. Many technical details flowed into her mind and she understood why they could not repair the terra-forming machines. They had not been properly calibrated to Electra's environment to begin with, and had made the problems worse so that the only way of saving the human population of Electra had been to make them...

Suddenly, she could move. The knowledge had released her. She stared at the strange white blur that was her arm,

... something other than human.

Picking up on this, the Silver Lady spoke again.

Are you not human? Your new bodies have been programmed with the capacity to experience

interpersonal love, strive for self-improvement, overcome obstacles, and occasional engage in pointless aggression. From our understanding of your literature, we believed that those were the qualities that defined being human.

"Yeah, but we never really meant any of that. It was just artistic bullshit," Byron said.

"What happened to the Commonwealth? Do you know?" Michiko asked.

The Silver Lady answered.

We do not. There are indications of some kind of catastrophe, but nothing definitive. Most of Machine-kind relocated to the Galactic Core long ago, where energy is abundant. We only stayed behind to watch over you, but now, our task is done.

"Are there any other humans left... anywhere?"

## We cannot answer this.

Now, Michiko was able to turn, to see Byron. Shock flowed throughout her body to see what he had become.

The man who stood before her was the figure of Byron, clothed in translucent white skin. She could see – no, more she could sense – power flowing underneath his skin in veins like optical fibers. His face looked like it had before, but smooth and transparent as glass, surrounded by a pale blue halo of light.

Your new bodies draw energy directly from the sun, through a process of photosynthesis.

You'll find that your perceptions have increased by a factor of approximately sixteen. Time will seem to pass more slowly for you, but it is instead you who have been accelerated. It was necessary to adjust your metabolism to accommodate your photo-synthesis based physiology and, higher mental processing will be necessary both to maintain your bodies and complete the adaptation of the planet to your needs..

"Are we the only ones?" Michiko asked. "Did you need to experiment on the entire colony to make us right?

We made sure the process was safe by testing it on the first group of humans we transformed. We monitored their development very closely before taking the rest of the colony. They are all waiting for you, your mate and child as well. You will be returned to the surface now. Your colony will survive. Make sure you have as many offspring as possible.

Twenty-two years passed.	

Michiko rested on her bridge, looking out over New Tulare. There were a hundred thousand inhabitants

in the city, and another ten thousand in New Modoc. There were plans to seed ten new outposts with a thousand persons each by year's end. One would be named for her.

New Tulare was different now. All around the colonial core, spread out across the valley were crystalline pyramids, tetragons, geo-domes. All clear to let in the life-giving energy of Electra's sun. At night, the city glowed with excess light absorbed during the day, plus that which the Palladium-Yttrium fusion generator provided. Its streets were lined with fig and apple trees she and Torrance had recovered from Modoc, and the strange silvery and purple trees the geneticists had developed, plant-like based on the physiological template the machines had given them.

A tiny figure came upon her. "Grandmother, we are going to the cloud-gardens, would you come with us?"

Michiko had mothered ten children, and now had four grandchildren. They had discovered that the sensation of swirling droplets of ionized water was highly pleasurable on their curious skin, and so the city had build the cloud gardens, which filled the largest of the geo-domes.

She put a fig into her mouth and absorbed its sweetness and energy. Orchards and gardens were throughout the city now. Few ate from them, but most enjoyed the flowers. Sometimes Michiko yearned for the taste of groundnuts and bitter water. The next generation seldom ate, but had chosen to outfit their bodies with petal-shaped solar collectors that spread on their back like peacock feathers. As day broke, the youth of New Tulare could be found lined up across the Day-Parks, their solar collectors open, yearning to collect the first rays of the rising sun, said to be the best.

She rose. "Let us go. Where is your father?"

"Making birds," she answered. That was what Hiroshi did. They were making electroid animals... that's what the children of the 399 called themselves now, electroids.

She felt her grand-daughter's hand in her. When in physical contact, emotions flowed between them. You could hide nothing. There was no lying in the colony. There were no secrets. They walked to the cloud gardens, a distance of six kilometers they covered in an instant. It seemed all the children were there, dancing in the mist and rain. Their joy was so great it flowed into her, and she felt well-being. This was a good day to be alive.