

**ONCE THEY SEE YOU
NOWHERE IS SAFE.**

**ERIC
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ECHOES OF OLYMPUS MONS

Olympus One colony students Hal Leon and Akio Sato have made history. Their invention, a camera that images dark matter, has had its first successful test; but what it reveals may put human life on Mars in jeopardy.

Hal believes that the strange animalistic silhouettes hidden in the dark matter web prove his theories. The wiry, inhuman forms appear to look to the sky at some invisible threat before they're wiped away by a wave of nothingness that resets the dark matter web to normal, until it all repeats again—a never-ending cycle.

That is, until something else appears in the dark matter web, and students and colonists alike start dying under mysterious circumstances. Can Hal and Akio figure out what's causing these grisly murders, and does the dark matter camera somehow hold the key to the mystery?

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**A NOVEL BY
ERIC MALIKYTE**

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Sunrises on Mars are always strange to behold. I watched a small white globe cut through a cobalt-blue haze over Olympus Mons, cascading its light dimly across the red planet's dusty surface. I'd been living here almost three years, and the sight never ceased to captivate me. The most morbid part of me imagined what it would be like if I tore off my protective suit and felt the Martian elements for myself. If I didn't die from being flash-frozen first, I'd lose consciousness within little more than fifteen seconds. Hardly enough time to feel the dusty

breeze on my icy skin, no? People on Earth don't know how lucky they are, how much they take for granted.

So, until humanity could find the means to terraform Mars, I'd have to enjoy my Martian sunrises from within the confines of the EVA suit.

Within minutes, the sky transitioned into its usual butterscotch tone, and the experience was over. A new Sol had begun.

A familiar jingle rang through my helmet. Akio was calling.

"Answer," I said.

"Yo, Hal," Akio said. "Just wanted you to know Wolfrik knows about your unscheduled walkabout. He's pissed!"

"I'll bet he is." I frowned and turned for the airlock. My heads-up-display was telling me I only had three minutes of oxygen left anyway. "Thanks for the warning."

"Uh-huh, see you at home."

I was always very thorough when hacking the airlock logs and removing myself from the security footage. Someone must have overheard me talking to Akio about my morning walkabouts in the corridor. Whoever it was had snitched on me—most likely fearing that I was going to end up another lost human popsicle—otherwise there'd be no way Wolfrik could have known about it.

I had to wait a few seconds for the airlock to compress, and for decontamination procedures to finish up. A red light on the far wall turned green, telling me that it was safe to remove my suit. I popped the latches one by one and strolled into the EVA staging area. Most of us found the official term boring. Walkabout always seemed far more fitting, especially after some Australian student named Connor Wilson had gotten cabin fever, suited up, and walked off into the Martian sunset. The last thing he'd said was: "Goin' on walkabout, be back maybe, tell my mum I said hi." At first everyone thought it was a joke, until he'd been gone long past the time that his air supply would support him for. They're still trying to find his body with the satellites. The sandstorms probably buried him long ago; Olympus Mons is a massive area to search for something so small. Since then, no student at Olympus One has been authorized to go out on an EVA without the supervision of a trained Milkyway Unlimited employee. Mars is a desolate, angry world. Never know when, or if, you'll come back.

I removed several layers of insulation and cloth that could almost be considered armor, before I heard the hiss of the door opening and footfalls at my back.

I turned to face Wolfrik; his face was contorted, his eyebrows furrowed, his beady blue eyes stabbing at me. I smiled.

"Why do you smile?" he asked. *Why do you smile?* His German accent always cut through when he was angry.

"I had a nice walkabout."

He folded his arms, probably in an attempt to keep himself from choking me. "Tell me, Geraldo. Why is it that you do not seem to believe in procedure, or safety?" *Tell me, Eralto. Why is it that you do not seem to believe in prosheture, or shafety.*

This was serious. He'd used my legal first name.

I sighed. "It's not that I don't believe in it."

"Then what?" *Then vhat?*

I shrugged. Maybe honesty was my best bet? "Look, I just needed to get out for a little while. See the sunrise without three fucking feet of transparent polymer in the way. There's a world out there and I'm going stir-crazy in here."

As long as he didn't know I hacked the door logs and the security cams, I should be able to get off without much more than a stern warning and a slap on the wrist.

He sighed; the hard look in his eyes did not soften. "Yes, it would seem that your family is no stranger to madness."

"Excuse me?" My fists tightened; my teeth clenched, sending pressure through my skull.

He jerked back, flinching as if he feared I'd knock his fucking teeth out. I was real tempted. When I didn't, he paused and considered me. His eyes softened momentarily. Then, he shook his head, sighing.

"Fine," he said. "If you go out again, and something goes wrong"—he jammed his wrinkled finger into my chest—"it is your own fault. I will hold no responsibility for your actions. Is that understood?"

I gritted my teeth and nodded. Wolfrik turned for the door. I could have let it end there.

But something snapped inside of me.

"So, just like it was with Connor Wilson?" I said.

He turned around, his face contorted. "What did you say?"

"Your solution to my walkabout fascination?"

"This was different."

“I don't think so. You acted in your best interests to keep the investigation team off your back so you could keep your job. It's nice to know that you'll extend me the same courtesy should the same happen to me.”

His eyes narrowed; his pale German skin turned a ripe, apple red. “Get out of my sight and get to class!”

I could feel Wolfrik's eyes stabbing holes through me as I made my way to the door. The doors hissed, and I passed through them. I should have kissed his ass and begged for forgiveness, considering he has the power to end my career in academia with a few careful words to the right people.

I stopped in the hall. Echoing footfalls from passing students filled my ears as I remembered her lying in that hospital bed the night she overdosed. My mother had an IV coming out of her good arm. Doctors had no trouble finding the vein.

I remembered the lifeless look in her eyes, and the piercing glare from my father as he held her limp hand by the bedside.

I remembered what his eyes said: “*Your sin did this.*”

2

Planetary Physics was lasting about three hours too long. Professor Brown droned on about Martian terraforming theories... you know, if we actually had the ability to kick start Mars's core. Not much point to mowing the grass if your atmosphere gets blown away by the solar wind.

The problem, of course, is that there is no known technology that can force Mars' core to generate a powerful magnetic field again. And even then, there's the possibility that Mars just doesn't have enough mass to sustain an atmosphere. Whatever transformed the planet into a desolate hellhole billions of years ago did a damn good job of it.

I caught myself drawing angry stick people shaking their fists at the solar wind.

The ADHD is strong with me.

I slid my personal tablet out of my pack and began to work on the blueprints to my and Akio's magnum opus, what we called the dark matter camera. I tapped my stylus on the metallic edge of my tablet, staring at the design I'd made. Akio's suggestions from the night before hung over my work like sticky notes. She wanted to redesign the case, fearing overheating, and as much as it pained me to admit it, she was right.

I felt someone kick my left foot. It was Gila, an Israeli botany major. The whites of her eyes were like polished marble against her eye-shadow, to merely call her cute would be an insult to her beauty. She and I had spoken only a handful of times in the past. Most people knew who she was by the Armada tattoo she had on her neck. Apparently, she was a huge gamer.

She leaned in, her pale brown eyes focused on my blueprints. "What's that?"

"Oh, just a little something I've been cooking up," I said.

"Yeah? Looks complicated."

I grinned. "You might say someone who majors in botany might find it a little complicated."

"Come on." She frowned, kicked me again. "What is it?"

"All right, fine. Theoretically, it can detect concentrations of dark matter and three-dimensionally map them."

"Mars has dark matter?"

My eyes drifted from Gila to where Professor Brown was standing, droning on about nanobots or some other bullshit. She was sufficiently distracted with the details of manipulating her lecture program through the tablet interface. I leaned in to Gila and kept my voice nice and low.

"Uh, yeah, dark matter's everywhere," I said. "Well, sort of. It's more that what we *call* dark matter is everywhere."

"What do you mean by that?"

"Well, back in the early twenty-first, it was thought that dark matter and dark energy made up ninety-nine percent of the visible universe. Dark matter was thought to be made up of something other than baryonic matter, and dark energy was this mysterious energy that permeated the entire universe. We went decades believing in a thing we only knew existed through numbers and equations."

"So...it doesn't exist?"

"Not in the way we once thought. The two are in fact aspects of the same force, existing outside our perceptive reality, but occupying the same space. Richard Roth discovered that shortly after the third world war. His gravity well experiments proved that not only were dark matter and energy the same, but that they permeated the whole universe, and the effects could be felt through every dimension. When the discovery was made public, it was Roth who eliminated the term 'dark energy' all together."

"So...it *does* exist?"

“Yeah, but we can't really do much with it. We can tell it's there, and some researchers are developing ways to harness it as fuel for faster-than-light engines, but progress is quite slow.”

“If no one can use it, why make a camera that can see it?” She grinned.

“Do you know what causes evolution?”

“Natural selection.”

“No, that's the *process* of evolution, not the *cause*. I mean what causes complex life and consciousness to evolve in the first place. What makes a thing decide to become a thing.”

“Decide?” She shook her head. “Sounds like you're looking for God.”

“Negative.” I grinned. “I'm looking for the origin of consciousness, a mechanism through which information is transferred through quantum entanglement.”

“Well, I don't know what that is.”

“Right, well, no one else does either. I—well, Akio and I—think that dark matter has something to do with how life started on Earth—”

“Is Akio your girlfriend?” I could almost feel her heart beat from where I sat.

“What? No. We're just roommates.”

She smiled. “Go on.”

“Anyway, we think dark matter is what drives evolution. If we can prove that—” I sighed, strangling my stylus. “—then...”

“Then what?”

“Then I can—”

“Oh...” She froze. The whites of her eyes became widened ovals.

“What is it?”

I looked forward, and the professor was staring right at us.

“Harold,” the professor said. She always fucked up my name. “That is a fascinating anecdote on dark matter. Would you care to tell me what it has to do with the study of planetary magnetic fields?”

She'd tapped right into the audio controls in my desk to listen in. Sneaky bitch.

“My name is Hal, Professor, and *gladly*.” I stood up and gestured with my hands as if to ask to take her place at the front of the classroom; Gila gave me a worried look and shook her head, as if she knew what I'd do next. “It's a stretch, but, based on the fact that we have equations that utilize dark matter as an energy source for FTL engines, and if dark matter is everywhere—as Richard Roth proposed—then we should be able to use the same technology

that would allow for FTL speeds in space craft to reignite Mars' core and get it spinning again. This is, of course, something that could be achieved much easier through magnetic induction, but you asked how dark matter relates to our class's subject matter.”

“And why do you think that harnessing dark matter would produce enough energy to reactivate the core?”

“Given the fact that an object that is moved up to or beyond the speed of light has infinite mass, this isn't too much of a stretch from my point of—”

“We don't have the technology to harness dark matter, *Harold*,” Brown said. “This class is about applying current technologies and proposing real-world solutions to the problem, not *science fictions* like the one you propose.”

“Yes, and we see just how well real-world solutions work out. As I recall, the attempts to create a planet-wide magnetic field generator on the surface resulted in making the Schiaparelli crater three times larger—and three times as charred—instantly vaporizing its inventor, no less.”

“Accidents happen sometimes. Just because people die testing a prototype technology does not mean it isn't viable. By your logic, we should have ignored every important scientific discovery made by Marie Curie before she died of radiation exposure.”

“It sure would have made the cold war more pleasant.”

The class erupted in laughter. The professor fumed at the collar, and poor Gila buried her head in her arms trying to hide her embarrassment.

“It is mankind's folly and arrogance to assume that we can do things better than nature itself,” I said. “It would be better to use technology to revive the core than to try to supplement a working one on the surface with technology that's proved to be unreliable. Surely, even you see that?”

“Even me? What the hell is *that* supposed to mean?”

I shook my head. “Nothing, I'm only saying that, while it's a noble pursuit to try to solve Mars' magnetosphere problem solely with our technology, we've already seen that it's far more difficult than we initially thought. It was once thought that living on Mars was a 'science fiction' that would never be realized, and yet here we are.”

“I think you've derailed this lecture enough already, Mr. Leon.”

“And here I thought I was contributing a worthy debate topic.”

“And now you can leave.”

Perhaps I should have listened to Gila?

I'm an idiot. Professor Brown had been looking for a reason to throw me out of class again. That made three times that I'd been thrown out of a lecture in two different classes, and the disciplinary committee—headed by Wolfrik—would be breathing down my neck about it. Although, with the most extreme consequence they could throw at me, the expense to send me back to Earth would be more than my degree multiplied by many thousands, and I'd argue exactly that.

The rumor mill would be spinning again after this. I'd got a bit of a reputation around the colony for being a pretentious asshole, and it's not entirely unfounded. My father would be so *proud* of me. The fact of the matter is, I imagined that living on Mars would mean far less human interaction.

It hadn't exactly worked out like I imagined. Most colonies on Mars are forced to conserve space, and Olympus One was no exception. Even though I was an undergraduate at university level, the school component of the colony comprised most degree programs beyond high school. There were only one hundred people on-site, and even so, the colony could feel surprisingly cramped. I could feel it, walking the corridors. How at any moment, one disaster, one mistake, could send us all to our deaths.

Technology had advanced quite a bit since the first settlers came to Mars, with their weak canvas HABs and their rovers, but the danger here was still quite real. They had to rotate the use of each airlock into the colony after one of them imploded from overuse. There was a microscopic hole in the material that sealed the hatch from the Martian elements beyond. Three students and one professor died in that one. Then there was the smallpox scare that caused a whole sector to get quarantined—some idiot had thought it'd be interesting to see how smallpox would grow in Mars' low gravity.

Hell, you had to sign about thirty legal waivers before they'd even let you on the space elevator, let alone the ship.

It was only 10:30 in the morning; I had the entire Sol to myself. I decided to rush back to my apartment and get some more work done on the dark matter camera. Akio had class till 14:30, so she wouldn't be home for quite some time—I'd have a head start on the prototype.

I waved my palm in front of the keypad and the door to my dorm room; the lights blinked green and the door hissed open. My kitchen was a mess: plastic reusable plates, a half empty bottle of "gin," and what remained of last night's feast were scattered all across the bar where I'd

passed out. I grabbed the gin and took a long swig; my eyes locked on the lab and the prototype.

It was scattered in several components on the workstation (which comprised what any ordinary student would call their living room). Wires ran everywhere, leading into a small hydrogen power cell Akio had “liberated” from a rover that was under maintenance. You might call it overkill for a glorified interferometer, but this way the camera would never run out of power if we had to leave it on the surface for an extended period of time. Most automated tech sent out to roam the surface was solar powered; all it would take was one sandstorm and the solar cells would be useless. Akio had originally proposed using a hydrogen cell as a joke, but when we considered long-term surveys of the surface where we might not have easy access to the device, it became clear that no other battery would do.

I shuffled past the other prototype cameras, each in various stages of development. One was to function as a helmet. We’d built it using a headset for one of those augmented-reality games that so many students get distracted by. There were a few that bore some resemblance to the final prototype design we’d come up with; some had bulkier cases, botched wiring jobs (which, despite what Akio says, were not my fault), inferior interfaces, and corrupted operating systems.

Stretching some gloves over my hands, I dropped my goggles over my eyes and got to work.

Once the screen was attached to the casing, I reached to power it on...but hesitated. The obvious, minute danger of testing an experimental hydrogen-powered device aside, I knew that Akio would want to see it. I wouldn’t have been able to get this far without her.

My hand dropped back to my side, and I looked around my—our—messy living space.

She had been irate about the state of the kitchen in the morning before my walkabout. If she saw it like this when she came home, I’d end up with a soldering iron burning through my abdomen for sure. I attempted to kill some time by cleaning house, washing the dishes, and throwing dirty coveralls into the laundry vat...but those activities only managed to kill an hour. I grabbed my tablet and sent Akio a coded message.

Hal: *I have a surprise for you when you return.*

She was likely in class, so she probably couldn’t respond immediately. I toyed with the idea of hunting down Gila’s profile on the shared drive and harassing her about what Brown had done after I was booted out of class, but before I could go through with my plan, I heard a message notification ring on my tablet.

Akio: **GASP* You're going to propose. And after all this time!*

Hal: *Ha. Ha. Can you get out of class early?*

Akio: *Unlike you, some of us value our education and opportunities at Olympus One.*

Hal: *I guess I'll just activate the prototype alone, then.*

Akio: *You finished it?!*

Hal: *Can you get out of class?*

Akio: *And tell Prof. Thornhill what exactly?*

Hal: *Stick your finger down your throat and yak on the floor or something.*

Akio: *Oh, talk dirty to me, baby.*

Hal: *Just figure something out. You have thirty minutes.*

Akio: *Fine, fine, jeez.*

I waited impatiently for thirty-five minutes, putting some old Rush recordings on to keep me company.

Akio shook her head upon entering our dorm room.

"You know, if I didn't know better, I'd swear you were actually a bear," she said. "Think of it, first bear on Mars."

"I did clean, you know," I said.

"Yeah—" she took a careful look at the slight improvement I'd made on the kitchen—"you managed to clean *half* your mess up."

"You came to see the results of our experiment, didn't you?" I picked up the device, careful not to disturb its connection to the hydrogen fuel cell.

"Yes. What the hell have you done to my baby?"

She rushed up and grabbed at it. Her body was small, almost boyish, and her personality matched. She eyed the machine closely, rolling it around in her field of vision, the way a mother might examine her young for lice.

"Looks like you took my suggestion to heart about the casing," she said.

"Yeah, well, seemed like an exploding hydrogen cell would be bad for my health."

"Oh, please, the new cells only have a one-percent chance of exploding." She stuck her tongue out at me, then returned her focus to examining the prototype. "And it seems like you didn't completely botch my wiring, despite your enormous fingers."

"Fuck off."

She smiled and set the prototype back in my hands. "So, should we do it here?"

I shook my head. She wasn't going to like what I was about to suggest. "We're going outside."

She stared at me for a second, her face twisted like a cat freshly doused. It was almost cute.

"You know," she said, "I always defended you when others called you a reckless sociopath, and a pretentious asshole... but now—"

"We don't know if it'll work, Akio. And even if there's only a one-percent chance, if anything were to go wrong, and the fuel cell ruptured, the entire colony would be at risk. Remember the douchebag who released smallpox into the colony?"

"Shit, we don't want to be that guy."

"Yeah, we don't want to be that guy." I grinned.

"Did I mention how much I hate you right now? Because I hate you."

"Let's suit up."

4

Daylight was dying in the west behind us; Olympus One's bulbous, round buildings and interconnected tubes and junctures were silhouetted against the dim blue haze of the sunset. Our own silhouettes bobbed and mixed unevenly with the dusty surface as we carefully made our way to the spot where we'd test the camera.

"Turn it on," Akio said.

I turned my whole body to face her, now garbed in her own EVA suit; Phobos was completing its last orbit of the day behind her.

"Here goes," I said.

I opened the camera shutter, pressed the power button.

The machine, cupped in my hands, sent vibrations up my arms. It was almost soothing. The serrated vents on the side gave off a slight glow, giving hints at the internal structure of the interferometer. The lens extended, and the digital display in front of me showed the mirrors and magnifiers shifting into position inside the camera. The hydrogen fuel cell stayed cool on my belt, thanks in part to Mars' sub-zero temperatures. The data started to pour in.

"Anything yet?" Akio asked.

"Not sure," I said. "The data could take some time to compile if the concentration isn't dense enough..."

“But, if we did it right, it shouldn't matter where we are, or how much dark matter there is, right?”

“I see what you did there.”

“I know, clever, right?”

I nodded. The data finally seemed to finish compiling, and the three-dimensional image began to render.

It was like looking at the known universe at a distance. The image known as the “universal web” came immediately to my mind. We were but tiny specs at the center of a massive, glowing web of violet energy, with filamentary networks that stretched into and out of everything. Individual strands of dark matter connected each and every glowing cluster of energy, like strands in a widow's web. There were thousands of those clusters, stretching up into the night sky, a lattice-work of chaos that blotted out even the brightest stars in the panorama. It was a network that stretched through and permeated every dimension, every world, every nook and cranny of the universe. Created from detecting the slight—microscopic—variations in atoms and molecules in our physical reality caused by matter intersecting with dark matter. And we were the first ones to ever see it.

I looked up and smiled.

What was displayed on the screen seemed to jive with some of the reports from the data taken from satellites that had been retrofitted to detect dark matter in space, but those couldn't actually image the dark matter, and they certainly couldn't do the image before my eyes justice.

For the first time since coming to Olympus One, I felt a fire burning inside of me.

“It worked,” I said.

“Wow, really?” Akio said. “It's like I haven't been standing here watching you this whole time.”

Akio quickly grabbed the machine, spinning me around awkwardly in the process. Her eyes went wide and took on the glow from the monitor inside her helmet. I stifled a chuckle.

“Wow,” she said. “I imagined it'd look different.”

“We're the first to see it,” I said.

“Wicked.” She grinned. “We're gonna be stupid rich from this.”

“Oh, and just what do you expect to do with money on Mars?”

She stuck her tongue out at me, and I took the machine back.

“We should head back just in case Wolfrik changes his mind about my extra-colonial activities,” I said. “I don’t want to chance him seeing the machine before we have a chance to patent it...”

“Has anyone ever filed a patent from Mars?”

“Not that I know of...”

I wrapped the cable up and powered the machine down, making sure to save the data gathered. I couldn’t wait to get it back inside and take a deeper look at the holographic snapshot. Akio started walking ahead of me.

It’s funny how genderless we all look inside a space suit. Most of Akio’s features were obscured, but her dainty walk gave her away. The way she always remained dignified with each step...like a cat always seems regal after recovering from a falling on its face.

I remembered my mother getting dressed up for date night. Father was late coming home from work. The makeup she’d used to cover the black eye was convincing, but my mind painted it back into place. Even in her shame, she wanted to feel dignified.

“Hal,” Akio said, bringing me back to reality. “Are you going to show it to your dad when you get back?”

“Yeah,” I said. “If it leads where I hope it leads.”

“If we can use the data to prove our hypothesis.”

“I have a feeling it will.”

“Darwin would fucking love us.”

“Maybe.”

“No maybe about it.” She turned around, her face lit up under the harsh crimson light inside the airlock. “It’s not every day that you discover the mechanism behind evolution. I imagine he’d extend his hand, bow, and say something like, ‘righteous job, dudes.’”

“Dudes?”

The chamber pressurized, the light on the door flickered from red to green.

“I watched a lot of cartoons as a kid,” she said.

“Obviously.”

“Like you didn’t?”

“Cartoons were of the devil.”

“No way!” She covered her mouth like it was a surprise that my childhood had been sheltered.

“I’m already thinking about how the panorama fits our theory.”

“Me too, I can't get the striations that connect each of the clusters out of my head.”

“You think that's how information passes between celestial objects?”

She nodded. “It could be, yeah. Like electrical impulses passing from the brain to various parts of the body?”

“We need to be careful not to get too far ahead of ourselves, though. We need to collect as much data as possible.”

“Duh.”

We were halfway through undressing when she looked up at me, her eyes softened.

I avoided her gaze.

“What?” I asked.

“Don't you think it's cruel?” she asked, trying to hop one leg into her coveralls.

“Don't I think what's cruel?”

“Trying to destroy someone's faith?”

I shrugged. It was more complicated than that. Something I couldn't put into words. “Not like he'll believe it anyway. He'll think it's some devilish trick. Hell, I bet he doesn't even believe we're all really here on Mars, like it's some stage in Hollywood or something.”

She nodded. Akio came from a loving family, a sane family most likely. I doubted that she could relate.

We finished getting dressed, stashed the suits where we found them, and hacked the logs on the doors and lockers to make it look like we were never there. I'd erase the footage from the cameras later to complete the job.

When we got home, Akio broke the silence by saying goodnight and retreating to her room. I was too restless to sleep, so I loaded the three-dimensional snapshot onto my tablet and began inspecting it.

The image was, essentially, a panorama of the Martian surface surrounding myself and Akio, with the holographic dark matter network overlaid on top. The sky was a haunting deep purple; the silhouette of a dust storm raged off in the distance, clawing at the frigid air, fighting for life on a world where there was none. The land was almost black beneath our feet, save for the lights on the camera and our suits that illuminated the red Martian soil.

The web was composed of violet striations, which seemed to have thicker concentrations out in the distance of the image. I zoomed into each striation, each cluster, which had striations and branching filaments of their own, curving, bridging, flowing through the planet as if they were the strings on which it dangled.

There seemed to be larger concentrations around (and through) Akio, as well as through my own body. The dark matter around Akio seemed to be spinning, reaching into the air, while the concentration around me was dull, faded. I dragged it around a full 360 degrees.

Something, however, caught my eye. I zoomed in several times. I shook my head, rubbed my eyes.

It had to be a misread of the data...

There was a violet humanoid shape several feet away from where Akio and I were standing in the image.

Maybe the shape was nothing more than a data fragment, or a repetition of the same violet dark matter formations seen around my and Akio's bodies? That would be the most likely explanation; but, something, maybe intuition, told me that wasn't the case, that it was something else entirely.

For one, the violet silhouette's arms and legs were in a completely different position than mine or Akio's. That wouldn't be the case if it was just a ghost image caused by the camera stitching the photographs together to make the panorama.

It was almost as if that violet silhouette was taunting me, daring me to take a trip down the rabbit hole.

And down the hole I went.

The dark matter concentrations around Akio and me reminded me of a research project I'd done last semester on non-local consciousness. There are some quantum physicists who theorize that human consciousness is not merely an effect of the brain. That the human mind exists in the same place as the body, but in a different dimension. My research project was about the idea, and the theory, that consciousness is made of dark matter.

I still remember the argument vividly.

"I just can't accept this, Geraldo," Professor Jameson said. "Your argument for this is heavily biased and it shows."

"And yours isn't?" I asked.

"I'll admit, I don't like the theory one bit, but I would have been willing to give you a higher mark if you'd at least tried to remain unbiased when discussing other theories that contradict your own. You have an almost religious fanaticism when it comes to this."

That set me off. "Seriously? Religious? I was unbiased when I mentioned the other theories. You're using your opinion of me as an excuse to tank my grade on this paper."

"That's a pretty heavy accusation, Geraldo."

“Hal.”

“Hal,' you need to realize that not everyone shares your view on this, and you're going to get laughed out of every class you bring it up in, especially if you use 'remote-viewing' and 'near-death-experiences' as evidence. Hell, I would have been slightly more accepting if you came out and said ghosts were real, and you were the reincarnation of Albert Einstein!”

“I didn't use those as evidence.” I crossed my arms. “If you actually read the fucking thing, I used them as an example of good areas that might benefit from further study, considering it's not a huge stretch to imagine that dark matter and quantum entanglement probably have some relationship. If a particle can describe another particle's spin from any distance, who's to say that humans don't have some latent ability to do the same? There are cases of mothers feeling the exact moment when their child dies, and the same is true of twins that experience traumatic events.”

“And this somehow means that consciousness is non-local?”

“I'm not the only one who believes in this, you know?”

“Really? Where are these mythical creatures?” He looked around me at the class behind me. “Are there any in here? No? Okay. Looks like you're alone after all.”

“I'll prove it someday.”

“You won't, not if you continue to try to force-fit the data to your viewpoint. You're just as bad as a twentieth-century creationist who thinks the dinosaurs lived with men.”

I slammed my hands on the table. “And you're as blind as someone who thinks the Earth is *flat!*”

I heard chuckles coming from behind me and felt the piercing stare of other students looking up from their terminals to see what all the drama was about.

Professor Jameson glared at me. “Get out of my class.”

I smiled. “Gladly.”

Professor Jameson and I barely spoke after that. And no other student tried using non-local consciousness as the subject of their paper in one of his courses again.

But, if the dark matter camera were to continuously photograph concentrations around the human body, then perhaps the theory held more water than my professor thought? If the silhouette was reproduced in subsequent tests, things would get even more interesting.

Perhaps it would be *me* who got the last laugh in that particular argument?

I decided to bring these things up to Akio in the morning.

My eyes drifted, lazily, to the clock, and I saw that it was getting late. I moved some papers and boxes off of the couch, and plopped down for a quick nap.

||

I jerked awake as Akio dumped a bucket of water over my unconscious body.

“Wake up, damn it!” Akio said.

I sat up. “What the hell was that for?”

She sat the bucket down next to the couch and pointed to the clock on her tablet's screen.

“It's almost noon, Hal,” Akio said. “You slept through your morning class.”

I wiped my face with my palms and watched the water drip off the plastic couch. It pooled onto the hard-plastic floor and slipped down a drain close by. Can't have anything wasted on Mars. Everything must be recycled.

I looked back into Akio's dull brown eyes.

“I'm sure they'll live without me for a day,” I said. “You could have just nudged me awake, you know?”

“No,” she said. “I tried that. You kept tossing and turning, muttering in your sleep about something. I was almost worried.”

I rubbed my eyes. “I must have been more exhausted than I thought...”

“Yeah, maybe. I grabbed your assignments for you, and you can have a copy of my notes to study from. You can thank me later.”

That wasn't it. My head felt heavy, as if I hadn't rested at all. I felt the pang of a memory just out of reach. Perhaps from some kind of nightmare?

I got up, strolled over to the kitchen; grabbed the coffee pot, dumped it, refilled it, snatched a coffee packet, turned the brewer on.

“You should get in touch with your professors,” Akio said.

“Can't.” The coffee pot started to drip, pooling precious black gold into the bottom of the pot.

“Why not?”

“Because we're going on walkabout today.”

Her eyes blinked several times while she processed the idea. “Wolfrik will lose his mind if we do that again. If they knew what we did last night—”

“Apparently Wolfrik doesn't care what I do anymore.”

“I guess that makes me guilty by association?”

“You're welcome.”

“Why do we even need to go outside? The hydrogen cell is stable. Why not just test it in here?”

“I want to see how dark matter interacts with the planet. That's not something we're going to see if we limit our focus to inside the cramped corridors here. Panoramic shots don't work too well inside.”

“We should still do some tests inside.”

“And we'll do that, but the big picture is out there.”

The coffee-pot was almost a quarter of the way full; I pulled it out prematurely and poured myself a cup, then sat at the counter, watching the steam swirl into the air. Akio walked around and grabbed a cup from the sink, rinsed and washed it with her hands. She waited for there to be enough coffee for another cup, poured herself a generous amount, then took the seat opposite me.

“You need to see the panorama in high definition,” I said.

“From last night?”

I took a long sip. “Yes. There's a curious aspect of it I want your opinion about before we go out.”

“Now you're assuming I'll go.” She leaned back, a slight grin wrinkling the skin of her left cheek.

“You will once you see what we got from the test.”

“That good?”

“See for yourself.” I fetched my tablet from across the living room, brought up the panorama and handed it off to her.

She took it in her dainty hands. Her eyes went wide as she manipulated the image, twisting it and moving it in any direction she could. I moved behind her to see what she was looking at.

“What is the glow around us?” she said.

“Getting to that,” I said, parrying her finger away and focusing on the part of the image I'd seen last night. “Look at this sector here. See that shape there?”

She nodded. “What is that?”

“Not sure.”

“Could be an artifact...or maybe it's just repeating the glow around us farther in the image?”

“If that was the case, why are its limbs in completely different positions than ours? In any case, we won't know for sure until we get up to the summit of Olympus Mons and run another test.”

She set the tablet down and rubbed her eyes. “Forget it. You know how long it would take us to walk up to the summit?”

“That's why we're not going to walk.”

She pushed me back and walked off to the coffee-pot to pour herself another cup. “You better not be suggesting we steal a rover.”

She looked me in the eye; I grinned.

“That's exactly what you're thinking!” she said.

“It'll be easy,” I said. “You know the security codes for the hangar anyway, they'll never know that one's even missing.”

“And what if something goes wrong? What if the hydrogen cells give out halfway up?”

“Then we use the solar cells.”

“What if we crash and the air tanks rupture?”

“Then we die.”

She glared at me. “Yeah, I'm out, sorry.”

“All great discoveries come with a certain amount of risk. Mars is a dangerous world, yes, but so is living here. Do you realize that any number of things going wrong here could spell doom for us all?”

“What's your point?”

“What's the difference if it happens out there or in here? Death is death.”

She tried to avoid my gaze.

“I'll tell you what the difference is, Akio, out there you'll be helping to break ground on something no one's ever seen. A new technology that could open the door to the universe for us.”

“A new technology?” She shook her head. “Aren't you making it sound a bit too grandiose? We invented a camera that images dark matter, not a machine that manipulates it.”

“And yet, this may grant us the data we need to prove our hypothesis. Look at the glow around us and the silhouette again, there's something you're missing.”

She stared at it for a time, squinting and shifting the perspective. “I don't get it.”

“The glowing dark matter concentrations around us could be positive evidence for non-local consciousness.”

She rolled her eyes. “Not this crap again. I thought you gave up that outdated theory?”

“Just because a theory is unpopular does not mean it isn't true.”

“One might suggest the same thing of God, and you're adamantly against the notion that one exists.”

“There's a big difference between some bearded idiot sitting in a chair, governing all life in the known universe with a set of arbitrary rules, and the existence of non-local consciousness.”

“Not from where I'm sitting. I think it's been widely proven that human consciousness is a product of the brain and nothing more.”

“It might be more accepted, but the evidence doesn't necessarily suggest that. There are a lot of things that your theory doesn't explain, like out-of-body-near-death-experiences where the subject is able to perceive their own body and surroundings and even travel to other places before being revived—”

“Clearly just a fabrication of events created by the brain to explain the lack of activity—there's nothing to suggest that the subject's consciousness magically got up and walked off.”

“Then how do you explain instances where the subject is able to perceive events and areas that they never could have known of prior to having the experience?”

“Lucky guesses, or maybe the subject overheard bits of conversation that led their subconscious mind to piece together the information later.”

“That's a bit of a stretch.”

“Not as big as yours.”

“Okay, then what about the observer effect?”

“What's that got to do with non-local consciousness?”

“Everything. How do you think the state and spin of an entangled particle is instantly described, if not through a transference of information that transcends the physical relationship of matter? We see this in other forms of matter, where they behave as a wave when observed, and as a particle when they're not being observed by a conscious subject. It's as though the sentient, conscious observer acts as a probability generator when it comes to how it interacts with reality.”

“Probability generator—where do you get this stuff?” She made a face at me. “I don't see how the observer effect is affected one way or another by where consciousness comes from. For all you know, dark matter might act as a conduit for the transference of information that serves to facilitate evolution, perhaps as some kind of means of an exchange of information from different parts of the universe. It doesn't mean our mind exists somewhere else.”

“And yet, we have the same hypothesis. We arrive at it from different points of view, but what is more plausible for the generation, evolution and organization of complex life in our universe? Your way of thinking—*boring*—” I paused for dramatic effect. Akio rolled her eyes, but I could tell she was holding her breath, so she wouldn't burst out in laughter at my theatrics. “—or, that there are many levels of consciousness, that dark matter *is* consciousness, or is a means of connecting it to biological forms, and that thereby drives and *wills* life into existence.”

“I still like my version better.” She smiled, then threw a wadded-up piece of paper at my head. “I think you trivialize the role of the brain. The brain is awesome! Who's to say that panspermia isn't a direct result of information being downloaded into the dark matter web and transported across the known universe, thereby causing life to happen on worlds where it's possible?”

“Dark matter web?” I leaned back.

“You like it?”

I smiled. “Has a nice ring to it.”

We sat silent for a few minutes drinking our coffee.

I leaned forward. “Fine, then prove me wrong. We can even make a wager on the outcome.”

“Provided I help you hijack a rover and violate about thirty different safety regulations?”

“Yes.”

“What's your wager?”

“I'll clean the dorm room for the rest of our academic career here on Olympus Mons if you prove me wrong.”

“No thanks, I'll pass, your idea of cleaning still leaves me with a metric ton of work to do.”

“Fine, then I'll clean it to your specifications for that period of time.”

“With no complaints or bellowing?”

“Sure.”

She sighed. “Fine, damn it, I'll do it.”

I smiled. “I knew you'd come to your senses.”

“However.” She raised a finger into the air.

“Damn it.” I sighed, planting my head on the counter. “What is it? And don’t say that you want me to clean naked, that’s not happening.”

“You have to try requisitioning the rover first...though that would be a nice touch.”

“No, it wouldn’t, and they’ll deny us. Connor Wilson fucked that up for us.”

“And if they do, we’ll try it your way.” She grinned. She had me. “The look on your face tells me everything I need to know.”

“Which is?”

“That you’ll do it, even if you despise the idea.”

I finished my coffee and used my tablet to set up an appointment to talk with requisitions.

2

Akio went ahead to her next class while I strolled over to requisitions. The student rep there was eating one of those new Salad in a Box things that Milkyway Unlimited sent up with the last shipment of supplies. He chewed the green and yellow food bar with all of the slow, deliberate motion of a cow that’s just realized how relaxing it is to chew grass and stare into oblivion.

I knocked on the desk. His thin, tired eyes met mine, and he instantly knew me. “Whatever it is, I’m sure you should be in class, Geraldo.”

“Hal,” I said.

He rolled his eyes. “What do you want?”

“I’m on a mission,” I said. “Class project.”

“Which class?” His left eyebrow rose. Where did I know this guy from?

“Planetary Physics? I need to do some surface tests on Olympus Mons for the upcoming mid-term.”

“Oh, the class you got kicked out of yesterday?” He chuckled. “Trying to salvage what’s left of your grade after insulting Professor Brown?”

“Yes, that, exactly that.” I smiled, leaned in. “Look, I know I screwed up, and I’ve got to do something big to make an impression on her.”

“I’d be more than glad to help, as long as it falls within safety regulations. What would you like to requisition?”

“A rover.”

His dreadlocks almost slapped me in the face as he reeled back in laughter, holding his stomach and everything.

“Are you finished?” I asked.

“Wolfrik would never allow someone with your reputation for insubordination to take a rover out onto the surface!” He shook his head. “You can put in for the request, but I can't promise anything.”

I nodded, and begrudgingly put in my request for the rover on the terminal next to captain jackass. I left, headed for engineering to pick up another bottle of “gin.”

Dane avoided my gaze when he saw me coming down the corridor. He was looking left and right at his station, dark circles floated beneath his sunken eyes. This time of day, the rest of the Engineering department was usually at lunch, and Dane liked to eat his right in this corridor, where his customers could find him.

“Man, I just took care of you a couple days ago,” Dane said. “You wanna burn my whole supply or something?”

“You make it sound like you're dealing in meth or something.”

“Quiet down, will you?” His voice transformed into a hushed whisper as he looked behind me. Paranoia was painted on his sweaty face.

“Relax, I just want a bottle.”

“Which flavor? I'm working on some new flavors, might even be able to mimic the taste of whiskey soon.”

I shrugged. “Surprise me.”

Dane grinned. He spun around on his butt, setting his ration bar on the plastic food tray next to him. He hopped to his feet with all the grace of an emaciated stray dog and walked around the corner. I followed him to the door to a supply room, which hissed open after he put in an access code on the side panel. Once we were inside, the door shut, and Dane dug his fingers into a hidden access panel in the wall. He reached his arm into darkness, the sound of bottles clanking together caressed my ears—music to my soul—and he produced a large bottle of clear liquid the size of my forearm, then shut the compartment and sealed it with a love tap from his elbow.

The bottle was cool to the touch when he placed it in my hands. There was a label: CHERRY. “What do I owe you?”

“A favor when I ask for it,” he said.

“What'll it be this time? Hacking the feeds again so you can sneak into the showers, a prank against one of your fellow workers in Engineering, or, perhaps, supplies?”

He smacked my arm. “Shush!” Then he came in closer, whispering. “Supplies. Soon. This batch won't last forever, especially with you around, and I can't be seen sneaking into the greenhouse.”

“So, that's where you get your corn?”

He nodded. “They're wise to me, though. Put up cameras and shit from what I hear.”

“I have ways around cameras.”

“Good, let me know when you can get me this list.” He palmed a small piece of paper into my bag. “Don't look back when you leave, Anderson is getting suspicious.”

“You still have the security cameras looped?”

He nodded. “Thanks to you.”

“And don't forget it.”

We both left the supply room, and I turned away from Dane and left him to his rations and solitude.

When I stepped back into the main corridor, a message ping rang off my tablet. I grabbed at my bag and eyed the message.

I gritted my teeth, squeezed my free hand into a tight fist until my fingers ached.

REQUISITION ORDER: DENIED

Good, I didn't want their fucking help anyway.

3

After depositing my cherry gin at home, I made my way over to the greenhouse. Eyes were on me. Botany majors filled the corridor and I stood out like a dead fly in my mom's menudo. I needed to blend in, and I'd need an alibi for later.

I found my way into one of the research labs. It was empty, thankfully. The lab smelled of fertilizer, and various species of plants were arranged on each desk. A few ferns, a common weed, and a dead watermelon plant that stank like Akio's feet after using the gym. I saw the answer to my problem on the back of a chair: a hooded lab coat and a pair of goggles.

I donned the garb of the botany expert and hoped to a nonexistent God that no one asked me anything about plants.

There were fewer stares now that my gear was in fashion. I made my way to the greenhouse. The door was open, so I walked right in like I belonged. The blood drained from my face.

The greenhouse was a glass dome. It always scared the shit out of me, even though everyone claimed it was made of a reinforced polymer. It was like standing on the surface of the planet without any protection at all.

Standing on the surface of the red planet can be a calming and surreal experience, and I've often wished that I could experience the sunrise without the need for an EVA suit, but this was almost nightmarish. The old fears of vacuum exposure came creeping out as I attempted to get ahold of myself.

I took a deep breath and focused on the plants. That helped.

I slapped the power switch on the wall, turning on the heat lamp that dangled from a magnetic track following the curve of the dome—hoping it might be a distraction from the Martian horizon. I reached inside my bag and withdrew several large plastic bags. I made my way through the greenhouse, picking corn and sugar cane. The other two items on my list—water and yeast—could be found later.

Once the bags were full, I walked right out into the corridor—keeping my head down. There were only a handful of people in the corridor. I got halfway down it, thinking I'd gotten away with it, when I saw her Armada tattoo.

Gila was talking to a friend of hers in the hall. I tried to scoot past her, but her eyes caught mine. My gut sank.

“Hal?” she said, sounding both excited and accusatory.

Her friend crossed her arms and glared at me.

“Gila!” I grabbed both bags with my left hand and waved at her, approaching them. If I was lucky, they wouldn't notice the bags.

“What are you doing all the way over here?” Her eyes drifted down to the bags, eyebrows scrunching together. “And, why are you wearing one of our lab coats...”

“Are you stealing plants?” Her friend's voice had a slight African accent to it. “That is a major violation.”

“Chill, Dalla,” Gila said, raising her hand. “I'm sure Hal has a logical explanation for this.”

“Right,” I said, wracking my brain to come up with some kind of explanation that wouldn't end with Wolfrik coming after me for stealing from the botany domes, and Dane from killing me in my sleep if it all led back to him. “It's...for an experiment?”

“Experiment?” Gila's African friend did not look the least bit convinced. I was officially in panic mode.

Gila nodded slowly. There was a tense silence between the three of us. I was sure that I was dead.

“Right!” Gila said. “I did say that I'd help you with that project!”

I nodded. “Gila gave me access to one of the botany domes so I could get a head start.”

“Uh-huh.” Her friend did not look convinced. She shrugged and turned, patting Gila on the shoulder. “Whatever, plants are dumb anyway. I'll see you later, Gila.”

“Later,” Gila said.

Once her friend was out of earshot, Gila pinched my arm.

“Ouch, what the hell?”

“Stealing! Really, Hal?”

I grinned, tossing the bag over my shoulder. “If you're so mad, why'd you cover for me?”

Gila shrugged. “I figure you're getting it for Dane. I've been known to partake.”

“Really now?” I laughed. “Now that *is* a surprise.”

“Anyway, I need to get to my next class, and you need to get those out of here before someone starts asking questions.”

“Right.”

Gila turned and headed down the hall. I proceeded to get the hell out of that sector before someone else recognized me. I'd send Dane a message later about picking his stuff up. For now, it was time to figure out how to steal a rover without getting expelled.

Returning to the dorm, I set the bags of ill-gotten corn and sugarcane in my room, then opened up my tablet and sent Akio a message.

Hal: *Guess what?*

I sat on the couch and stared at the dark matter camera. If we were going to do this, it had to be done right. There had to be no chance of us getting caught.

Akio: *You've finally realized your life long goal is to open up a taco truck on Mars.*

Hal: *Racist. I don't even like tacos.*

Hal: *No, our request got denied.*

Akio: *Shit.*

Hal: *Yeah...*

Akio: *So...that means...*

Hal: *Yeah, we'll talk about it when you get home. I wanted to get the data today, but I don't think we can do it till the weekend anyway, the trip would probably take two Sols, and someone would notice.*

Akio: *Right. Weekend it is then.*

Akio: *Oh, shit, Prof. Morison is looking right at me. TTYL.*

I set the tablet down.

"Can I do this?" If we got caught, it could mean expulsion. For a moment, I thought about what might happen if I was forced to return to Earth... I was certain my father would just love it if I came home a failure, my head hung in shame and my name forever tarnished within academia. I wrung my hands together until they became numb.

The dark matter camera meant more than even Olympus One did to me. In a sense, it was the entire reason I'd come here to begin with. But, if we could prove our hypothesis...maybe it wouldn't matter how many rules we broke to do it?

I shook my head, stood up, and made myself a cup of coffee.

"No," I said to no one but the walls and the mess of wires in our lab.

I told myself there was no way in hell we could get caught. Sipping a hot cup of coffee seemed to reinforce this idea. We could hack one of the rovers to look as if it'd been put on the maintenance schedule. No one would know it was missing.

If Akio and I were considered one being, we'd probably be the best hacker on Mars. There weren't many people on Mars to begin with, but still.

I sighed.

It was going to be a long wait till the weekend.

III

Lightning struck the surface sporadically; the dust rolled itself together like a thousand gargantuan fingers squeezing into a mighty fist. The rover's cage rattled over crimson rocks and spat sand that hadn't been disturbed in millions of years, splashing it backward like a boat cutting through the ocean—if the ocean had gravity of 0.4 Gs. I kept my hands tight around the controls. Akio had kept her helmet and gloves on the whole time since we'd left Olympus One.

I looked at her and grinned sheepishly.

"Fuck you," she said. "I don't wanna take any chances."

“Hey, I didn't say anything.”

“Yeah, your stupid face said it all.”

I chuckled, and she flipped me off.

Olympus Mons was about the size of France, but Olympus One was situated just a few kilometers up the gradual incline of the volcano, so the journey would take a little over one Sol at thirty-five kph, not taking into account the fact that the rover's speed typically varied due to terrain and incline severity.

I kept the comms down, and the jamming frequency up so the Admins couldn't call the rover back. We could always turn those back on if we got ourselves into any trouble.

“Is the storm going to hit us?” Akio asked.

“The HUD's telling me it's going to miss us by a few kilometers,” I said.

“Oh, comforting. Why did I let you talk me into this again?”

“Because you're a real scientist, and not one of those neck-bearded pansies who never leave Olympus One. Also, fame. Also, money.”

She rolled her eyes. “Right. How could I forget?”

I watched the dust storm rake its claws across the horizon to my left, red-orange dust licking up from the surface in waves, lightning dancing in the darkness. I tried to imagine what it might be like to be consumed by the storm. Martian winds typically never get any more intense than sixty miles per hour, but that wasn't the chief concern being inside one. Microscopic rocks and debris have a slight electric charge to them, and those lightning bolts could be a big problem if one hit the rover. The biggest challenge would be navigation. Sure, there'd be GPS, but that only told you where you were and where you were going, not what was in front of you and if you were heading for anything that might kill you.

Hours passed, light faded into night, and the controls became stiff in my hands. It was a safety measure baked into the rover to ensure that the stupid human driving it didn't run a four-billion-dollar piece of equipment straight into a giant rock or a crater. I relaxed my grip and let the AI do its thing, allowing me a break to look at the stars.

The constellation Draco drifted across the horizon. The stars glistened like tiny white fires in the night. It reminded me of the surreal feeling of driving through the countryside with nothing but a tank full of gas and a pollution-free sky for company years ago.

Akio had fallen asleep, using some leftover HAB canvas from some old class experiment as a makeshift pillow.

She had the right idea, at least. I set the computer housed in the gauntlet of my EVA suit to wake me before sunrise. I set my seat to recline and laid my head back against the chair's headrest.

I watched the stars for a while as sleep crept up on me.

2

This time, when I dreamed, I remembered it vividly.

I stood on the surface of the red planet. The constellation Draco was bright above me. Each star was a concentration of dark matter within the violet web. Striations stretched from the stars, scattered across the dark matter web, through my own body. Raised me up off of my feet, dangling me like a puppet.

There was something on the horizon, a jagged spire of a silhouette blacker than even the night sky.

A sense of panic tore through me when I saw it. I couldn't move anymore.

"Hal," Akio's voice called to me. Her voice seemed strangely detached.

I felt something move my head to the right.

Akio was still in her EVA suit, but the screen on her gauntlet was dead. She was dangling from threads composed of dark matter, just like me. Her eyes were white, her lips cold.

I woke up wondering where her voice had come from. My heart was racing. I almost reached out and shook Akio awake, but seeing her shallow breathing from inside her suit stopped me.

I looked at my gauntlet. It was still three hours till my alarm would sound.

I couldn't sleep.

Before I knew it, the sun was rising through that familiar blue haze against the highest reaches of Olympus Mons's caldera. The coming light gave me back control of the rover, and I guided it down a hill, inside the caldera, and kept driving until I found a large flat area that would suffice for our experiment. By the time I came to a stop, the sky had already transitioned from blue to butterscotch.

I nudged Akio's shoulder. "Wake up. We're here."

She fumbled in her seat. "We're alive?"

"Yes. The storm missed us, like I said." I grinned. "You ready to go outside?"

"You're going to be the death of me, aren't you?"

"Probably. Do you want to stay inside the rover where it's safe while I do all the work?"

"Fuck no!" She flipped me off while I slipped my helmet on, fastening the clamps in place. I pressurized my suit when she was ready and gripped the latch.

"Ready?" I asked.

Akio nodded with stiff, wild eyes and tight lips.

I popped the seal and stepped onto the hard, dusty surface of the caldera. The Martian dirt had the consistency of powdered sugar beneath my boots. Dragging a mounting pole and our invention with me, I checked my HUD. The temperature was minus 45 degrees Celsius, with no other weather anomalies this morning. Picnic weather.

"Are you sure it'll keep working through the night?" Akio asked as I walked the pole out toward a spot that looked soft enough to spike through.

"It should be fine as long as it doesn't dip below minus 70. Even then, the cold won't stop the machine from turning back on when it warms back up."

"You're not typically so optimistic. It's possible extreme cold could do significant damage to the wiring."

"I doubt it." I let out a grunt, arched my arm back, and spiked the pole into the dirt; crimson dust clung to my boots.

I opened up the claw at the end of the pole and fastened the dark matter camera into it, closed it back up and tightened the fasteners until I was sure it wouldn't drop.

"Okay, what about sandstorms?" Akio paced around me, her hands twitching together.

“Winds don't get any stronger than sixty miles per hour, not strong enough to knock over the pole.”

“And dust?”

“The dust'll get on the casing, sure, but I doubt it'll be out here long enough for any real damage to be done.”

“You're going to come back for it?”

“We.”

“Sure, just as soon as pigs roam the surface of this gloriously bleak world in massive packs, creating ozone from the massive piles of crap they leave behind in their wake. That is to say, *no!*”

“So you say.” I booted up the machine, let it run through its diagnostic phase and checked to make sure everything was working fine with the screen on my gauntlet. “The systems check out.”

“Can we go now?”

“How about breakfast first?”

“Fine, but as soon as we're done, you drive us the hell out of here.”

“Deal.”

We marched back to the rover, climbed inside the cab, and waited for the pressure to re-equalize. I removed my helmet and set it on the floor to my right, Akio following my lead as soon as she saw that I was not in fact suffocating in a vacuum. I opened a plastic package containing a dried beefsteak and placed another package containing a shortbread cookie on my knee. I stared at the beefsteak for a moment too long, catching a whiff of the smell.

“Well, are you going to stare at it, or eat it?” Akio asked.

I nodded and shoved the beefsteak into my mouth. When eating rations on Mars, the only way to avoid gagging from the taste is to consume what passes for food as quickly as possible.

I made a show of how much I hated that beefsteak by making every grossed-out sound I could manage as it slithered down my throat and splashed safely into the confines of my stomach. This seemed to amuse Akio.

She giggled. “That's why there's no obesity on Mars.”

“Makes sense.” I rolled my eyes, gagging and looking for something to erase that horrible aftertaste. “Or, they don't choose anyone who isn't in perfect health because they're afraid they'll die from a heart attack or implode.”

“That too, but I imagine if you gave a reasonably healthy—and fat-man this shit to live off of for four years, they'd probably end up lean as fuck by the end of their stay.”

“Or they'd walk off into the Martian sunset without a spacesuit, because you just took away the man's only hypothetical reason to live.”

“Cruel, aren't I?”

“Extremely, but at least now you're not wearing the helmet like a coward.”

She smacked my arm, knocking my cookie to the floor.

“Ouch! What was that for?”

“You have to ask? Why'd you have to remind me, jerk?”

I shrugged. She wasn't scared anymore, at the very least.

Akio and I scarfed the rest of our meal down as quickly as possible and consumed enough water to keep us hydrated for the drive back.

She put the helmet back on and I tried not to chuckle.

The return trip went faster than expected. I guess due to the fact that we'd already made the trip once. The Sun kept pace with us for most of the journey and was only beginning to edge behind Olympus One by the time we returned.

Once we entered the range of the campus network, our controls immediately seized, and the rover began to drive off toward the eastern wing of the colony.

Something had gotten through my jamming frequency.

“Well, that's not good,” I said.

“What?” Akio's eyes went wide, and her breath was hoarse. Her hand ready and waiting to pressurize her suit.

“Looks like the Admins got through my jamming frequency. There's an auto-recall on the rover, as soon as we passed into network range our controls were seized.”

“Shit!”

“Relax.” I kicked my feet back and tossed her a mischievous smile. “What's the worst they can do to us?”

“Expel us! Send us back to Earth!”

“Bah! They don't have the balls to spend the millions it would cost to send both of us back to Earth.”

“You don't know that, Hal!”

“Relax, I'll just tell them the whole thing was my idea and I coerced you into it—which is mostly true. Most you'll get is a slap on the wrist.”

“And you?” Her lip started to quiver.

“I’ll be fine. Watch.”

The rover twisted and turned around one of the domes, circled the greenhouse, and passed under a bridge, until we entered a large pressurized hangar. The Martian sky vanished behind us, and we were greeted by the angry faces of Wolfrik and the rest of the Admins.

I waved at them, gave them my best smile.

4

“You put me in a strange position here, Geraldo.” Wolfrik leaned forward, clasping his clammy hands together beneath the all-encompassing white light of what we affectionately referred to as *The Box*. “What you did was reckless, and even if you care nothing of yourself, you could have killed Akio.”

The Box was like solitary confinement. A formless white room that played tricks on the eyes and made one feel as though they were going mad if left there alone for too long.

Despite my reputation, this was my first time in The Box. It had originally been intended to help deal with cases of cabin fever and claustrophobia. There were built-in holographic projectors that could allow you to see any kind of environment: the sprawling, clean flowing waters of the Grand Canyon, the great heights of the Himalayas, the greatest cities in the world...

Wolfrik, however, liked to use it to teach problem students what a big fish he was. I’m not even sure the holographic projectors had ever been used.

“Do you have nothing to say for yourself?” Wolfrik asked.

I leaned back, propped my feet up on the table. “Let’s be honest if this is an expulsion hearing, Wolfrik. You don’t give a damn about either of us, you’re only concerned about what could have happened to the rover.”

“This is not true.” His accent was coming through, I was getting to him.

“But I think it is.” I leaned forward, the humor melting from my face. “You want to label this as a joyride and a woeful disregard for authority. The second part is definitely true, in part, but the first is not. It was not a joyride. It was an experiment.”

“An experiment?”

“I can’t get into specifics yet, the patents for the device haven’t been made. You understand, right?”

His thick eyebrow rose. "I'll believe it when I see it. Even so, if that were the case, I am not understanding why you didn't put in an official request to borrow the equipment, we could have worked with you and ensured that the proper safety—"

"I did put in an official request, and it was denied, you shyster."

He paused for a moment, looking at his tablet to confirm that I was telling the truth.

"Still, you did not have to resort to stealing—"

"Oh, please, spare me with that shit. We both know that you wouldn't have let me take the rover, and why the hell would you? You made that clear yesterday when you brought up my mother."

"Your upbringing has little to do with what you did here."

"Doesn't it, though? I've heard the way you all talk about me. Don't think that I haven't. I've found ways of reversing the mechanism you use in our desks when you want to hear and see everything we're doing, and the things you say are quite revealing. *'That degenerate will never graduate, I'll make sure of that!'* and *'He doesn't belong here, he's not one of us!'* And, my favorite: *'He belongs in the asylum with his mother.'* was what you said. Why, Wolfrik?"

"I never—"

"You did, you son-of-a-bitch!"

His eyes narrowed; he removed his glasses and rubbed them. "Yes. I said that, because you are a problem, Geraldo. You do not follow the rules, you argue with your professors and drive good students to mischief."

"I want a lawyer."

"A lawyer?" He looked genuinely confused. "You don't get a lawyer."

"Then, I want a trial by combat. If I kill you in battle, you have to set me free."

Wolfrik rubbed his eyes. "Is that how you want this to go, Geraldo? Keep playing these games, I can't tell you how well it will go for you at your disciplinary hearing."

"No, Wolfrik, I really want a trial by combat."

"Stop that."

"Stop what, Wolfrik?"

"Calling me that."

"That's your name."

"I have a doctorate, you should address me—"

"It's irritating, isn't it? To be called something other than your desired name."

"It is. So, stop it."

We both grew quiet. I glanced around The Box. I couldn't even tell where the door had been. But I was sure that the other Admins were watching this.

I looked back into Wolfrik's angry eyes. "Do you want to spend four billion dollars to put me on a ship back to Earth?"

"If it comes to that."

"Guess you've all made up your minds."

"That's up to you."

"Is it?"

"I want to hear about this experiment."

"No."

"No?"

I nodded. "No."

"That's unfortunate, Mr. Leon. I had hoped that you would be cooperative, but, as usual, you choose to be difficult. Your expulsion hearing will be held in five days. Until then you are suspended from all academic privileges and are confined to your quarters."

"Oh, joy."

"I trust you're fine with the consequences of your actions?"

"Always."

"You'll be escorted by campus police, now get out of my sight."

"It's been delightful, as usual."

Wolfrik gave me one last piercing glare as a hulking mass of a man seized my arm and shoved me into the hallway outside The Box. The officer wasn't much for conversation, and that was fine by me.

On the way back to my dorm, passerby students gave me downcast looks; whether those were pity or revulsion, I couldn't tell for sure. News travels fast.

The campus officer pushed me through the door to my room.

The door clanked and clacked behind me; the light turned from green to red. Effectively, I was a prisoner in my own home.

My place was just the way I'd left it earlier, so there was that, though I wouldn't have any network access with my privileges suspended. There were ways around that, though, and I'd need access to check on the progress of the experiment.

That was my one saving grace, even if they did ship me back to Earth. I'd have the discovery that Akio and I made.

I paused. Here I was, about to be expelled for breaking the rules, and all I could think about was my work, my obsession. I sank into the couch, staring at the wall. I imagined myself returning home, my head hung low, my father smiling ear to ear.

“¿Ves lo que te lleva tu ciencia preciosa?” *Do you see now where your precious science gets you?* he'd probably say.

“Fuck you, Father.”

How had we gotten caught? I'd been certain that my plan was fool-proof. I wanted to feel angry at Wolfrik, at the Admins, for catching us, for locking me up and throwing the keys to my future away. Instead, I only felt empty inside. I told myself that I didn't care. That I'd make it as a scientist one way or another. I almost believed it.

My eyes drifted to the bottle of moonshine on the counter. I poured myself a glass, felt it burn the emptiness away.

I set the glass down. Left in isolation for mere moments and I'd already resorted to drinking. I needed to do something, occupy myself so I didn't polish the whole bottle off...

It had already been an entire Sol since we left Olympus Mons's caldera. The dark matter camera would have plenty of data to review. I grabbed for my tablet and, as expected, saw that there was no access to the school's network. The trick now would be to copy the permissions of another user and trick the system into thinking my machine was still granted access. I only knew of a few off the top of my head, Akio being one, and she was most likely being punished as well. Though, her punishment would no doubt be less severe, she would still be blocked from network access. They only deactivated a user's profile for three reasons: one, if the user is expelled and sent back to Earth; two, if the user graduates and leaves the facility, and three; if the user dies.

Who did I know that I could switch profiles with easily? If I hacked Wolfrik or any of my professors, they'd probably be on to me faster than a Catholic priest on an altar boy. I could probably find Gila's profile pretty easily. She probably wouldn't know it was me, either. The thing about being blocked from the network was that, although you couldn't access anything directly, you were still technically connected to it, and could see other users who were connected to it at the same time as long as you had the appropriate software.

As expected, Akio's profile was blocked, but Gila's profile was open. I made the necessary switch with the permissions and found myself able to navigate the school's web and academic forums, but I wouldn't need it for anything quite so boring. I quickly launched my

machine's operation program, the HUD that would allow me to see what it saw out there from the great crater of Olympus Mons.

There was over a Sol's worth of data recorded on the hard drive, and I could see that there had been no hardware or software failures in that time. I copied the files I needed, which took the better part of an hour due to the size, volume, and resolution of the images. Once the data was secure on my hard drive, I restored Gila's permissions and resumed my "punishment."

Now for the real work. I opened the image folder, setting the preferences to display each one in chronological order. The first image was expected, the violet web of dark matter overlaid atop a butterscotch Martian sky; the second image a slight variation of that, and so on and so forth. That was until I got to the fiftieth image, when a shape appeared in the bottom left-hand corner of the vibrant violet web.

I zoomed in on the shape. It was strange, almost animal-like, with round and bulbous shapes, like a squash, or an ant's thorax, where the torso would probably be. It had two thick legs, and four thin, wiry appendages. In the images that followed, the strange violet silhouette was joined by other identical forms. They appeared to be standing on an incline in the distance, despite the backdrop of the massive flat line of the caldera that stretched on for miles and miles.

Then, for some reason, the silhouettes turned around, and began to move, or run, or climb, the incline. This running, or stampede, if you will, continued for almost a hundred images, until they all seemed to be swept away into the normal shape of the dark matter web, like the tide rolling in on a dry beach to wash waiting crabs to sea.

After that, the images seemed to repeat from the beginning, that same shape standing on the incline, perhaps watching the sky for something? Cowering? Then others appeared around it, something happened, and they all stampeded up the incline again. This time, I noticed several forms left behind in the wake of the stampede, crouched, huddled with smaller silhouettes.

I looked at the image number and gasped. The files hadn't looped; they were all in sequence. The sky had gotten darker in the images too, changing to that familiar pink, and then a brief cobalt-blue before final darkness. The sequence just repeated over and over again, always the same, like a video stuck on replay for all eternity.

By the third repetition, I noticed that when the dark matter web returned to normal, it almost looked like a shock wave from an asteroid impact. Like the millions of documentary re-creations that depicted the extinction of the dinosaurs. When I examined each individual

“body,” or “form,” they all seemed to move with an individual purpose, and that purpose was repeated exactly in the next repetition.

I rubbed my eyes. It had been a very long day, and I was starting to get tired. As fascinating as the questions this raised were, some of them could wait for the morning. I'd have plenty of time to write and speculate, considering my confinement.

I cleared a spot on my plastic couch—which would soon not be mine anymore—and quickly let sleep take me.

The New Mexico sun beats down on my back. My skin isn't used to Earth's sun anymore. I swing my duffel bag over my shoulder. My father's house is as I left it three years ago; the lawn of rich grass where I once played as a child is now nothing more than dirt and weeds; the windows are dirtier, and the once-vibrant white paint has flaked and become decrepit.

My father is waiting in his favorite chair.

I say nothing to him.

He turns his head; his smile is ruthless.

"Do you see now where your precious science gets you?"

I woke to rustling sounds in the kitchen.

Wrappers crinkling, footsteps tapping.

At first, I thought that it could be Akio, free from her punishment, or whatever they had done with her, but the lock on the front door was still red and, glancing at my tablet, I could tell that no new entries in the door log had been made. My eyes started to close again—

The rustling turned to a deep scratching noise. My eyes opened again; the hair on the back of my neck stood on end. I could feel someone watching me.

I held my breath deep.

With wary eyes, I tracked the noises from the kitchen, to the other end of the living room, and into the bedroom, where the sounds stopped.

Maybe one of the guards was messing with me?

"Hey, who's there?" I asked.

No answer. Maybe it was all in my head?

I exhaled, sighing loudly.

And then, it was like one of those old trains had hit its brakes behind me. An ear-piercing screech erupted through the room; I covered my ears and felt something slam into the back of the couch. The couch rolled, and I went with it, tumbling across the room...